Classification of the Fruitfly-Pests from Korea*

Yong Jung KWON

Department of Agricultural Biology, College of Agriculture, Kyungpook National University, Taegu 635, Korea.

ABSTRACT

The Korean fruitflies are arranged and described taxonomically. A total of 48 species belonging to 39 genera under 7 subfamilies are represented in Korean fauna as the result. Of these, 12 species with 3 genera are new to science, and 19 species, 22 genera with 2 subfamilies are newly recorded respectively from Korea. The following new taxa are proposed: *Kwasilparia* gen. nov., *Syusiroitoa* gen. nov., *Chejuparia* gen. nov., *Urophora chejudoensis* sp. nov., *Vidalia koreana* sp. nov., *Pogonangelus assimilis* sp. nov., *Magnimyiolia interrupta* sp. nov., *Hemilea nabiae* sp. nov., *Kwasilparia multipilosa* gen. et sp. nov., *Syusiroitoa maculipennis* gen. et sp.nov., *Chejuparia pibari* gen. et sp. nov., *Ictericodes changhyoi* sp. nov., *Acinia jungsukae* sp. nov., *Tephritis koreacola* sp. nov., and *Paroxyna quelpartensis* sp. nov.

The Oriental fruitfly, *Bactrocera dorsalis*, was not found in Korea yet. Keys, some illustrations of various characters, host plants, and domestic localities for each species are given.

INTRODUCTION

The family Tephritidae, or fruitflies, are commonly found on flowers or vegetation in fields or forest, and most of the adults have spotted or banded color patterns on wings and bodies. Often the brightly contrasting pattern may serve as a visual cue for courtship within the deme or aposematic displays for enemy. The females have conspicuously developed ovipositors bearing with sharp piercers by which they insert their eggs deeply into the plant tissues, depending upon the species involved.

The larvae are all plant feeders consisting of several feeding guilds or units, and some are quite serious pests. Many of them are fleshfruit infesters, for instances, Mediterranean fruitfly (*Ceratitis capitata*), Oriental fruitfly (*Bactrocera dorsalis*), melon fly (*Zeugodacus cucurbitae*), Queensland fruitfly (*Dacus tryoni*), apple maggot (*Rhagoletis pomonella*), and Mexican fruitfly

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(*Anastrepha ludens*) are of great economic importance and cause serious damage by attacking oranges, apples, tomatos, or the other commercial fruits and vegetables in tropical to temperate regions of the world, all of which still not found in Korea, thus their incidental import or possible invasion into this country is strongly protected by the National Animal Quarantine Service of Korea, as major exotic warning pests.

Many are infesters of flower heads of various cultivated and wild plants, for example, the larvae of *Campiglossa hirayamae,* which distributed commonly throughout Korea, China, and Japan breed in the developing seeds of a wide variety of Compositae and cause severe loss of viability.

Some are leaf miners or stem borers, whereas others are gall makers on various kinds of plants.

But, their taxonomy, life-history including biological data are comparatively little available yet in Korea, notwithstanding their economic importance are stepped into the increasing trends worldwidely.

So, it is the author's purpose to revise and arrange this group taxonomically in accordance with the mordern reasonable classification system, to be useful to entomologists as a basic information for the management of fruitflies in Korea.

As a result of the present survey, all the known species previously are reviewed critically, and totally 48 species belonging to 39 genera under 7 subfamilies are treated, among them 19 species, 22 genera with 2 subfamilies of hitherto unrecorded from Korea, and 12 species with 3 genera new to science respectively are added.

An attempt to discover Oriental fruitfly, which infesting citrus orchards in Southern Japan, Southern China including Taiwan, Indochaina, Thailand, Indonesia and Philippines was made for possible occurrence in Is. Chejudo and several southern maritime islands, using the strongly effective attractant-methyl eugenol. But it was confirmed that this pest does not reach to these areas, yet.

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MATERIALS AND METHODS

Specimens investigated in the course of this work were obtained from various domestic localities throughout Korea, which now deposited in the collection of Systematic Entomology Laboratory, Department of Agricultural Biology, Kyungpook Nat. University, Taegu. The available collections of the Division of Entomology, National Science Museum, Seoul, and Department of Entomology, Institute of Agricultural Sciences, ORD, Suwon, were also inspected.

For the comparative survey, some specimens of the two exotic warning species, Oriental fruitfly (*Bactrocera dorsalis*) and melon fly (*Zeugodacus cucurbitae*) were examined with the aid of National Animal Quarantine Service, Anyang.

Field collections were made numerously throughout Korean peninsular proper with her adjacent islands, either in crop fields, forest or mountainous areas, by using various sweeping net methods and baits. And all the collected domestic localities are appeared here after the adminisrative geographical names of Republic of Korea, M. R. - Romanization was adopted for notation, but the provinces were abbreviated as following for convinience.

CB : Ch'ungch'ŏngbukto
CN : Ch'ungch'ŏngnamdo
GB : Kyŏngsangbukto
GG : Kyŏnggido
GN : Kyŏngsangnamdo
GW : Kangwŏndo
HB : Hamgyŏngbukto
HH : Hwanghaedo
HN : Hamgyŏngnamdo
JB : Chŏllabukto
JJ : Chejudo
JN : Chŏllanamdo
PB : P'yŏnganbukto
PN : P'yŏngannamdo

For confirming wheather the most possibility of the occurrence on the Oriental fruitfly (*Bactrocera dorsalis*) by airborning or incidental invasion in Is. Chejudo and some southern maritime islands, where citrus orchards are abundant, is real or not, an attempt to discovery was made by using the strong attractant, methyl eugenol (CH_2:$CHCH_2C_6H_3$ $(OCH_3)_2$): 'Tokyo Kasei Kogyo Co.' now applicated by many countries, such as Japan, China, and U.S.A. (in California and Hawaii), for either control, detecting or monitoring this pest periodically. For either control, detecting or monitoring this pest periodically. For this purpose, 200 sets of the attractant-absorbed sticky ribbons – 'Hanil fly-catch ribbon (3.7 x 80 Cm)' and several hundreds of filter papers (ϕ 11 Cm) were used as traps respectively, and each trap was pinned or fixed on trees and shrubs during the July to August when the adult population is high in Southern Japan, and Taiwan, (Chejudo: skirts of Mt. Hallasan and Chungmun,5-12, August, 1984; Chindo: 17-20, July, 1984; 12-13, August, 1984; Chopto: 19-20, July, Sinjido: 20-21, July, 1984; Wando: 20-22, July, 1984). Nevertheless there was no single specimen caught proving still that the population of this pest dose not extend to those areas. Laboratory works for specimens were examined with a trinocular stereoscopic microscope (Olympus SZ-set) and a trinocular optical microscope (Olympus BH-set, with PM-10a photographic system). Drawings were made with the aid of camera lucida (Shimazu, partly renovated by the author).

Tools for manipulation and procedures for dissection of the cleared genitalic structures

were prepared using methods similar to the author's common technique (10 minutes-heating with 10% KOH) in homopterology.

All the morphological terms used here are in accordance with general usage for dipterids, and the classification system adopted here are followed after Ito's (1983, 1984a-e).

The keys separating all the taxa known from Korea are given, the host plants previously reported and observed by the author and his graduate students or colleagues are included after examined and compared with the known records of other countries when available.

All the type-material described here will be deposited in the authors collection of Systematic Entomology Laboratory, Department of Agricultural Biology, Kyungpook National University, Taegu.

HISTORICAL REVIEW

The Korean fruitflies have been almost neglected except for some sporadic records on the local fauna in this country.

The first records of this group from Korea, so far as the author is aware, were published by Shiraki (1933) who described *Pseudacidia issikii* based on the material collected from 'Koryo' (=Kwangnŭng, GG), with the records of *'Acanthoneura pteropleuralis'* (sic, = *Lenitovena pteropleuralis*), *'Spheniscomyia sexmaculata'* (= *Sphaeniscus atilius*), and *Campiglossa hirayamae* all from the above same locality.

Zia (1937) listed Korea in the distributional range of *'Acanthoneura pteropleuralis'* (sic, = *Lenitovena pteropleuralis*) and *'Spheniscomyia sexmaculata'* (=*Sphaeniscus atilius*), in dealing with his first Chinese monograph.

Zia et Chen (1938) also listed Korea in the distributional range of the above two and *Campiglossa hirayamae* in treating with North Chinese fruitflies.

Zia (1939) subsequently listed Korea in the distributional range of *'Spheniscomyia sexmaculata'* (=*Sphaeniscus atilius*) in discussing South Chinese fruitflies.

Hering (1941) recorded *'Acanthoneura pteropleuralis'* (Sic, =*Lenitovena pteropleuralis*) occurring in Korea.

Chen (1948) listed Korea in the distributional range of *'Spheniscomyia atilia'* (=*Sphaeniscus atilius*) and *'Acanthoneura pteropleuralis'* (sic, =*Lenitovena pteropleuralis*).

Shiraki (1950) included Korea in the distributional range of the following three known species: *Campiglossa hirayamae, 'Spheniscomyia sexmaculata'* (=*Sphaeniscus atilius*), and *'Acanthoneura pteropleuralis'* (sic, =*Lenitovena pteropleuralis*).

In applied part, Lee (1963) recorded *Campiglossa hirayamae* in his Korean agricultural insect pests.

Ito (1965) included Korea in the distributional range of *'Acanthoneura pteropleuralis'* (=*Lenitovena pteropleuralis*), along with Japan.

Zool. Soc. Kor. (1968) made a list of Korean fruitflies as: *'Pseudospleniscus fossatus'* (sic, =*Hendelina fossata*), *Campiglossa hirayamae, 'Spgeniscomyia sexmaculatus'* (sic, =*Sphaeniscus atilius*), and *'Acanthoneura pteropleuralis'* (sic, =*Lenitovena pteropleuralis*).

Hyun et Woo (1970) reported *'Acanthoneura pteropleulis'* (sic, =*Lenitovena pteropleuralis*) from Mt. Chirisan.

Shin et Noh (1970) recorded 'Trypetidae sp.1' from Is. Sohŭksando.

Kim (1971) illustrated the following 4 fruitflies occurring in Korea: *'Acanthoneura ptero-*

Table 1. Some life-history data for Korean fruitflies with reference to Far East Asiatic occurrence. (data accumulated by Ito & Kwon, 1983-1985)

Fruitflies	Number of generations per year	Overwintering stage				Time of adult appearance											
		Egg	Larva	Pupa	Adult	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Paradacus depressus	1			+						+	+	+	+				
2. Urophora chejudoensis s.n.										+			+				
3. Oedaspis japonica	1			+							+	+	+	+	+		
4. Staurella camelliae	1			+				+	+	+	+	+	+	+	+	+	
5. Rhacochlaena japonica	1			+						+	+						
6. Lenitovena trigona	2			+				+	+	+	+	+	+	+			
7. L. pteropleuralis				+							+	+	+		+		
8. Erectovena speciosa				+						+	+	+	+	+			
9. Acrotaeniostola scutellaris	1			+							+	+	+				
10. Anomoia permunda	2				+	+				+	+	+	+				+
11. A. vulgaris	1			+						+	+	+	+				
12. Vidalia koreana s.n.												+					
13. Pogonangelus assimilis s.n.											+						
14. Shiracidia s-nigrum	1			+							+	+	+				
15. Magnimyiolia interrupta s.n.													+				
16. Paragastrozona japonica	1			+					+	+	+						
17. Parahypenidium polyfasciatum										+	+	+		+			
18. Pseudhemilea longistigma	1			+						+		+					
19. Hemilea infuscata	1			+					+	+	+	+					
20. H. nabiae s.n.												+					
21. Kwasilparia multipilosa s.n.												+					
22. Syusiroitoa maculipennis s.n.											+						
23. Trypeta artemisiae	1			+							+	+	+				
24. T. artemisicola	1			+						+	+	+	+				
25. Chetostoma continuans											+						
26. Philophylla marumoi	1			+							+	+	+				
27. Hendelina fossata	2				+		+	+	+	+	+	+		+			
28. Fusciludia aliquantula	1											+	+				
29. Pseudacidia issikii												+					
30. Sphaeniscus atilius	2	+								+	+	+	+	+	+		
31. Chaetostomella stigmataspis												+	+	+			
32. Xyphosia punctigera	2			+					+	+	+	+	+	+	+	+	
33. Aliniana longipennis	1			+						+	+	+	+	+			
34. Chejuparia pibari s.n.													+				
35. Ictericodes changhyoi s.n.												+					
36. Acinia jungsukae s.n.											+						
37. Oxyna parietina	1			+						+	+	+	+				
38. Ensina sonchi	2			+	+			+	+	+	+	+	+	+	+	+	
39. Tephritis carcassa													+				
40. T. koreacola s.n.													+				
41. Trupanea amoena													+	+	+		
42. T. gratiosa	2				+		+	+	+	+	+	+	+		+		
43. Dioxyna sororcula	2				+			+	+	+		+	+				+
44. Paroxyna messalina	1			+							+	+	+				
45. P. quelpartensis s.n.													+				
46. P. frolica													+				
47. P. sada													+				
48. Campiglossa hirayamae	2			+	+	+			+	+	+	+	+	+	+	+	+

pleuralis' (sic, =*Lenitovena pteropleuralis*), *Campiglossa hirayamae*, *'Pseudospheniscus fossatus'* (=*Hendelina fossata*), and *'Spheniscomyia sexmaculata'* (=*Sphaeniscus atilius*).

Kim et Kim (1971) reported *Aliniana longipennis* from Mt. Odaesan. They (1972) also recorded *'Sphaeniscus atilia'* (=*Sphaeniscus atilius*) and *'Stylia messalina'* (=*Paroxyna messalina*) from Kuch'ŏndong, Muju Kun.

Kor. Soc. Pl. Prot. (1972) listed *Compiglossa hirayamae* in the catalogue of Korean insect pests.

Hardy (1973) included Korea in the distributional range of *'Acanthonevra formosana'* (nec, =*Lenitovena pteropleuralis*) in his monograph dealing with fruitflies of Thailand and bordering countries.

Kim et Kim (1974) reported *Paradacus depressus* and *Acrotaeniostola scutellaris* from Mt. Paegyangsan.

Dirlbek et Dirlbeková (1974) described the following 3 species based on the material collected from Mt. Kŭmgangsan and P'yongyang: *Paroxyna frolica, Paroxyna sada,* and *Tephritis carcassa.*

Kim et al. (1975) reported the following 3 species from the vicinity of DMZ area: *Chaetostomella stigmataspis, Aliniana longipennis* and *'Tephristi majuscula'* (sic, =error for new species described here).

Kim, Kim et Yu (1976) reported the following 3 species from Mt. Ch'iaksan: *'Stylia messalina'* (=*Proxyna messalina*), *Trupanea gratiosa,* and *Aliniana longipennis.*

Hardy (1977) included Korea in the distributional range of the following 3 species in his catalogue; *'Acanthonevra formosana'* (nec, =*Lenitovena pteropleuralis*), *Sphaeniscus atilius,* and *Campiglossa hirayamae.*

Kim et Nam (1978) reported the following 4 species from Imgye Myon: *Oxyna parietina, 'Stylia messalina'* (=*Paroxyna messalina*), *'Tephritis majuscula'* (=error for new species described here), and *Xyphosia punctigera.*

Lee et Kwon (1981) reported *Campiglossa hirayamae* from Is. Ullungdo.

Kim et Chang (1982) reported *Paradacus deppressus* from Is. Pogilto and Is. Chagaedo.

It might be the latest work for the domestic fauna that Ito (1983, 1984a, c, d and e) included Korea in the distributional range of the following 4 species in his extensive monograph dealing with Japanese fruitfly: *Lenitovena pteropleuralis, Trypeta artemisiae, Pseudacidia issikii,* and *Sphaeniscus atilius.* Therefore, prior to this investigation, a sum of 17 species belonging to 14 genera have been known to represent correctly in this country as discussed above.

SYSTEMATICS

Family Tephritidae

Key to subfamilies of Korean Tephritidae

1. Bristles of dc, prst, st, and oc absent . . . . . Dacinae
   —. Bristles of dc, prst, st, and oc always present. . . . . 2.
2. Apical margin of anal cell straight or convex, forming inferior angle obtuse . . Urophorinae
   —. Apical margin of anal cell concave to angulate inwards, forming inferior angel pointed . . . . . 3.

3. Scutellum swollen and well polished, without surface hairs . . . . . Oedaspinae
   —. Scutellum not swollen, always scattering with surface hairs . . . . . 4.
4. Bristles of occ thin, mostly black; mesopleuron with distinct vertical suture before posterior margin; anal cell with inferior angle apparently produced . . . . . 5.
   —. Bristles of occ thick and obtuse, mostly yellowish; mesopleuron with vertical suture poorly developed; anal cell with inferior angle not prolonged. . . . . Tephritinae
5. Mesonotum always black; vein R_{4+5} bare or bristled only at base; abdomen shining, at least apically; antenna with arista pubescent . . . . . Aciurinae
   —. Mesonotum often yellow, or black; vein R_{4+5} bare or bristled; abdomen often mat; antenna with arista variable . . . . . 6.
6. Upper ors-bristle directed inwards; last abdominal tergite of female not shortly than preceding one . . . . . .Terelliinae
   —. Upper ors-bristle directed backwards; last abdominal tergite of female always shorter than preceding one . . . . . Trypetinae

Subfamily Dacinae

Genus 1. ***Paradacus*** Perkins, 1938

Type-species: *Paradacus fulvipes* Perkins, 1938
Type-locality: Indonesia (Borneo).

1. ***Paradacus depressus*** (Shiraki, 1933)

Zougodacus depressus Shiraki, 1933. Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 90-91, pl. 2(5).
Zougodacus depressus: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1667, f. 4798.
Zougodacus depressus: Suda in Furukawa et al., 1965, (Col. Encycl. Ins.): 448, f. 1005.
Paradacus depressus: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 221, pl. 111(4).
Paradacus depressus: Aoki, 1966, Commn. Ins. Jap. Col.:12, pl. 5(35).
Paradacus depressus: Shiraki, 1968, U. S. Nat. Mus. Bull. 263: 12-14 pl. 5.
Paradacus depressus: Kim et Kim, 1974, Rep. Kor. Ass. Cons. Nat. 8: 122①.
Dacus (Paradacus) depressus: Hardy, 1974, Pac. Ins. Mon. 32: 20.
Dacus (Paradacus) depressus: Hardy, 1977, Cat. Dipt. Or. Reg. 3:55.
Parazeugodacus depressus: Ito, 1977, Col. Ill. Ins. Jap. 2:261, pl. 51(890).
Paradacus depressus: Ed. Dep. Hokuryukan, 1979, Ill. Ins. Jap. Stud. ed.:296, f. 1663.
Paradacus depressus: Kim et Chang, 1982, (Gen. Rep. Nat. Cond.) 2:176.②-③

Type-locality: Japan and China (Taiwan).

Description: Head yellowish brown; frons broad, about as wide as eye; or-bristles 1:3; 2 oc-bristles markedly reduced; lunula very narrow, dark to dark brown, somewhat shining; face with a pair of black lateral spots above oral margin; antenna with 3rd segment about 4 times as long as wide in male, 4.5 times as long as wide in female, arista bare; gena with 1 ge-bristle, about as wide as 3rd antennal segment. Thorax yellowish brown, mesonotum with dark brown to black conspicuous markings, furnished with yellow pubescence; prsc entirely absent in male;

scutellum with 4 sc-bristles; mesophragma black, with a wedgelike brown median streak.

Wing hyaline pterostigma and r1 blackish brown, forming a costal band which strikingly extending at apex; and streak distinct, reaching marginal area; $1m_2$ with posterior corner infuscate.

Abdomen raddish brown, with conspicuous dark to black markings on dorsum; basal segment of ovipositor flat, shorter than 2 preceding tergites put together.

Length: Body 10-12 mm, wing 8-9.5 mm.

Locality: GW : Mt. Sŏlaksan.
JN : Is. Chagaedo (=Is. Jagae ③), Mt. Paegyangsan ①,
Is. Pogilto (=Is. Bogil ②).

Distribution: Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Ryukyus).

Host: Injuring fruits of Cucurbitaceae and Solanaceae; squash, tomato.

Subfamily **Urophorinae**

Genus 2. ***Urophora*** Robineau-Desvoidy, 1830

Type-species: *Urophora sonchi* Robineau-Desvoidy, 1830
Type-locality: France.

2. ***Urophora chejudoensis* sp. nov.**

Description: Head yellow to yellowish brown, with occiput black except peripheral portion; frons slightly narrowed anteriorly; or-bristles 1:2; 2 oc-bristles well developed; lunula narrow, shining yellow; face yellowish; antenna reaching to oral margin, 3rd segment about twice as wide as long, with dorsal side rather straight, arista very shortly pubescent; gena with 1 ge-bristle slitly wider than 3rd, antennal segment.

Thorax black, with a pale to yellowish band on each humeral callus to wing base; posternite yellowish brown; scutellum yellow, with 4 scbristles; mesophragma black; legs yellowish brown.

Wing with membrane milky whitish hyaline, without any prominent dark markings; R_{2+3} and R_{4+5} bare on both sides.

Abdomen black; basal segment of ovipositor strikingly elongate, shining black, furnished with black hairs, as abdomen.

Length: Body 5-6 mm, wing 4-4.5 mm.

Type-examined: Holotype female, Chungmun, JJ, S. Korea, 11, V, 1982, coll. Y. J. Kwon; paratype: 1 female, Mt. Hallasan, JJ. S. Korea, 10, VIII, 1984, coll. Y. J. Kwon.

Host: Unknown, but the larvae of this group usually feed on and develop in the capitula or stems of Compositae.

Remark: The present new species is allied to *Urophora tenuis* (Becker, 1907) from Central Asia, but is easily distinguished by the longer basal segment of ovipositor.

Subfamily **Oedaspinae**

Genus 3. ***Oedaspis*** Loew, 1862

Type-species: *Trypeta multifasciata* Loew, 1850
Type-locality: France.

3. *Oedaspis japonica* Shiraki, 1933

Oedaspis japonica Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2):350-352, pl.9(6).
Oedaspis japonica: Zia, 1937, Sinensia 8(2):180-181.
Oedaspis japonica: Shinji, 1944, (Galls & Gall-Ins.):310-311.
Oedaspis japonica: Chen, 1948, Sinensia 18(1-6):74.
Oedaspis japonica: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.:1657, f. 4768.
Oedaspis japonica: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3:221, pl. 111(7).
Oedaspis japonica: Aoki, 1966, Comm. Ins. Jap. Col.:12, pl.5 (34).
Oedaspis japonica: Ito, 1977, Col. Ill. Ins. Jap. 2:261, pl.51(892).
Oedaspis japonica: Ito, 1983, Jap. Bohrfl. 1:31-33.

Type-locality: Japan

Description: Head yellowish brown; frons slightly less than twice as wide as eye, rather parallel-sided, furnished with pale minute hairs behind lunula; or-bristles 2:3, black except upper ors which is apparently pale; 2 oc-britsles well developed; lunula large, twice as wide as high; face greyish yellow; antenna slightly shorter than face, 3rd segment about 1.5 times as long as wide, with arista shortly pubescent; gena with 1 ge-bristle, about 0.3 times as high as eye.

Thorax yellowish brown, with mesonotum mostly dark brown to black; scutellum yellowish with 4 dark spots at margin, having 4 sc-bristles; mesophragma black; legs mostly ochreous.

Wing 2.5 times as long as wide, with yellowish brown prominent 5 radial bands reaching to posterior margin; pterostigma with dark brown spots.

Abdomen ochreous to brown, somewhat polished; basal segment of ovipositor slightly longer than 2 preceding tergites put together.

Length: Body 4.6-6 mm, wing 4.5-6 mm.

Locality: GN : Mt. Ch'onhwangsan, Mt. Kajisan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu, Shikoku, Kyushu), China (Kingsu, Chekiang, Shanghai).

Host: *Artemisia* sp.

Subfamily Trypetinae

Key to genera of Trypetinae

1. Pleurotergite with long hairs; prst-bristle always absent (Tribe Euphrantini) . . . . . 2.
   —. Pleurotergite without long hairs; prst-bristle usually present, or absent. . . . . 3.
2. Arista of antenna long plumose . . . . . *Staurella*
   —. Arista of antenna shortly pubescent . . . . . *Rhacochlaena*
3. Scutellum with 6 sc-bristles (Tribe Acanthonevrini) . . . . . 4.
   —. Scutellum at most with 2-4 sc-britsles . . . . . 5.

4. Vein R_{2+3} wavily sinuous; having only 1 ori-bristle ..... *Lenitovena*
   —. Vein R_{2+3} rather straight; having 2 ori-bristles ..... *Erectovena*
5. Arista of antenna apparently long plumose (Tribe Gastrozonini). ..... *Acrotaeniostola*
   —. Arista of antenna shortly pubescent to plumose (Tribe Trypetini). ..... 6.
6. Vein m-cu strongly oblique, never perpendicular to M ..... *Anomoia*
   —. Vein m-cu not strongly oblique, almost always perpendicular to M ..... 7.
7. Upper ors-bristle reduced or absent ..... *Vidalia*
   —. Upper ors-bristle apparently present ..... 8.
8. Gena about half as high as eye, at least twice as wide as 3rd antennal segment ..... 9.
   —. Gena less than half as high as eye, at most 1.5 times as wide as 3rd antennal segment ..... 10.
9. Having 1-2 ge-bristles, or rarely absent entirely ..... 11.
   —. Having 3 or more ge-bristles. ..... *Pogonangelus*
10. Having 4-6 ori-bristles. ..... *Shiracidia*
    —. Having 3 ori-bristles ..... *Parahypenidium*
11. Frons strikingly protruding at antennal sockets, with profrons exceeding the width of 3rd antennal segment in profile ..... 12.
    —. Frons weakly protruding anteriorly, with profrons narrower than 3rd antennal segments in profile. ..... 14.
12. With ge-bristle entirely absent ..... *Pseudhemilea*
    —. With ge-bristle apparently present ..... 13.
13. Face markedly elongate, longer than frons ..... *Magnimyiolia*
    —. Face shorter than frons. ..... *Paragastrozona*
14. Bristles of ori directing backwards ..... 15.
    —. Bristles of ori directing forwards. ..... 17.
15. Having 3 ori-bristles ..... 16.
    —. Having 5 ori-bristles ..... *Kwasilparia* gen. nov.
16. Arista of antenna very shortly pubescent; scutellum strikingly compressed ..... *Hemilea*
    —. Arista of antenna shortly plumose; scutellum moderately convex mesally. ..... *Syusiroitoa* gen. nov.
17. Vein r-m locating near middle of cell 1m2 ..... 18.
    —. Vein r-m locating apparently beyond middle of cell 1m2. ..... 19.
18. Vibrissal edge almost bare, or only with some fine hairs ..... *Trypeta*
    —. Vibrissal edge with numerous strong bristles ..... *Chetostoma*
19. Vein R_{2+3} apparently wavy ..... 20.
    —. Vein R_{2+3} rather straight or very slightly wavy ..... 21.
20. Veins R_{4+5} and M divergent each other apically ..... *Philophylla*
    —. Veins R_{4+5} and M rather parallel each other apically ..... *Hendelina*
21. Veins R_{4+5} and M divergent each other apically ..... *Fusciludia*
    —. Veins R_{4+5} and M rather parallel each other apically ..... *Pseudacidia*

Tribe **Euphrantini**

Genus 4. ***Staurella*** Bezzi, 1913

Type-species: *Musca crux* Fabricius, 1794
Type-locality: India.

4. ***Staurella camelliae*** Ito, 1949

Staurella camelliae Ito, 1949b, Mushi 19(9):44-46.
Staurella camelliae: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1658, f. 4771.
Euphranta (Staurella) camelliae: Hardy, 1955, Pac. Sci. 9:82.
Staurella camelliae: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3:221, pl.111(10).
Staurella camelliae: Ito, 1983, Jap. Bohrfl. 1:44-45.

Type-locality: Japan.

Description: Head brown to yellowish brown; or-bristles 1:3; oc-bristles greatly reduced to absent; lunula dark brown; face greyish yellow; antenna about as long as face, basal 2 segments lighter in tint than 3rd segment which is dark brown and 2.5 times as long as wide, arista brown and long plumose; gena with 1 ge-bristle, about as wide as 3rd antennal segment.

Thorax black with yellowish surface hairs; humeral callus pale yellow; scutellum black with margin narrowly yellow, having 4 sc-bristles long; mesophragma dark brown with shining median streak; legs mostly brown.

Wing hyaline, with 4 transverse bands, the basal band fused with next one at pterostigma and reaching the apex of anal cell; cl about as long as pterostigma, apex of the latter hyaline; R_{4+5} bristled on dorsal side.

Abdomen shining black, with dirty yellow median streak; basal segment of ovipositor dark brown, flat, slightly less than 3 preceding tergites put togehter.

Length: Body 7-8 mm, wing 6-6.6 mm.

Locality: JN : Mt. Chogyesan.

Distribution: Korea (new record), Japan (Honshu, Kyushu).

Host: Injuring fruits of camellias, and sometimes infesting chestnut in larval stage.

Genus 5. ***Rhacochlaena*** Loew, 1862

Type-species: *Trypeta toxoneura* Loew, 1846
Type-locality: Germany.

5. ***Rhacochlaena japonica*** Ito, 1947.

Rhacochlaena japonica Ito, 1947b, Mushi 18(5):35-38.
Rhacochlaena japonica: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1661, f.4781.
Rhacochlaena japonica: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 221, pl.111(11).
Rhacochlaena japonica: Aoki, 1966, Comm. Ins. Jap. Col.: 12, pl.5(30).
Rhacochlaena japonica: Ito, 1977, Col. Ill. Ins. Jap. 2:261-262, pl.51(892).

Rhacochlaena japonica: Ito, 1983-1984a, Jap. Bohrfl. 1-2:48-50.

Type-locality: Japan.

Description: Head yellowish brown; frons furnished with black short hairs; or-bristles 1:3; 2 oc-bristles very short; lunula small and pale yellowish; face with 2 dark brown spots near oral margin; occiput with 2 large dark brown streaks on upper side; antenna nearly reaching to oral margin, 3rd segment about twice as long as wide, with arista shortly pubescent; gena with 1 ge- bristle, slightly wider than 3rd antennal segment.

Thorax dark brown, with 2 narrow dark longitudinal stripes on dorsum; pleura yellow to reddish brown; scutellum yellowish brown, with 4 sc-bristles long; mesophragma dark brown; legs mostly yellowish brown.

Wing hyaline, with 6 dark brown markings, the basal marking rather obscure, the apical marking largest; costal cell hyaline; R_{4+5} bristled on dorsal side.

Abdomen dark brown with yellowish streaks; basal segment of ovipositor dark brown, flat, nearly as long as basal width, slightly shorter than 3 preceding tergites put together.

Length: Body 5.5-6 mm, wing 6 mm.

Locality: **JB** : Mt. Mayisan.
JJ : Mt. Hallasan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu).

Host: The larvae of this species feed on cherry and the damage has been well known from Japan (Ito, 1984a). A braconid larval parasitoid, *Opius aino* Watanabe, 1938, is known from Japan.

Tribe **Acanthonevrini**

Genus 6. ***Lenitovena*** Ito, 1984

Type-species: *Trypeta trigona* Matsumura, 1905
Type-locality: Japan.

Key to species of *Lenitovena*

1. Scutellum with dark brown broad longitudinal bands, pale yellow mesally; wing with r5-cell having 2 hyaline spots mesally . . . . . ***Lenitovena trigona***
   —. Scutellum dark brown except pale yellowish apex; wing with r5-cell having only single hyaline spots . . . . . ***Lenitovena pteropleuralis***

6. ***Lenitovena trigona* (Matsumura, 1905)**

Trypeta trigona Matsumura, 1905, Thous. Ins. Jap. 2:117, pl.28(8).
Myiolia trigona: Hendel, 1927, Flieg. pal. Reg. 49:104.
Trypeta trigona: Matsumura, 1931, 6000 Ill. Ins. Jap. -Emp.:370.
Acanthoneura trigona (sic); Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 298-300.
Themara formosana (nec Enderlein): Miyasaka, 1935, Ent. World 3:150.

Acanthoneura trigona sinica (sic) Zia, 1938, Sinensia 9(1-2):16-18.
Acanthoneura trigona (sic): Ito, 1945, Mushi 16:85.
Acanthoneura trigona (sic): Chen, 1948, Sinensia 18(1-6):77.
Acanthoneura trigona (sic): Ito, 1949a, Mushi 19(8):41-42.
Acanthoneura trigona (sic): Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref. : 1659, f. 4775.
Acanthoneura trigona (sic): Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3:221-222, pl.111(12).
Lenitovena trigona: Ito, 1984a, Jap. Bohrfl. 2:54-55.

Type-locality: Japan

Description: Head yellowish brown; frons as wide as eye, with dark brown markings anteriorly and near ocellar triangle; or-bristles 2:1, the lower ors-bristle largest and locating middle between upper ors and single ori; 2 oc-bristles short; lunula pale yellow, deeply concave; face dark brown to brown; antenna shorter than face, 3rd segment twice as long as wide, dark brown, with arista long plumose; gena with 1 gebristle, slightly narrower than 3rd antennal segment.

Thorax yellowish brown; mesonotum dark brown with 5 black stripes; scutellum with 2 dark brown broad longitudinai bands, having 6 sc-bristles, among them the middle pair conspicuously short; mesophragma shining black.

Wing mostly dark brown, with anterior and posterior hyaline parts; pterostigma dark brown with hyaline basal streak, r1 with a subtriangular hyaline streak near sc and costal margin, r5 with 2 hyaline spots mesally.

Abdomen shining dark brown with yellowish dorsal markings; basal segment of ovipositor flat, as long as 3 preceding tergites put together.

Length: Body 6.5-8 mm, wing 6.5-8 mm.

Locality: JJ : Mt. Hallasan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu, Kyushu), China (Chekiang).

Host: Unknown.

7. ***Lenitovena pteropleuralis*** (Hendel, 1927)

Acanthoneura pteropleuralis (sic) Hendel, 1927, Flieg. pal. Reg. 49: 58, pl. 2(8).
Acanthoneura pteropleuralis (sic): Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 301①.
Acanthoneura pteripeluralis (sic): Zia, 1937, Sinensia 8(2): 140, pl. 2(12) (Corea).
Acanthoneura pteropleuralis (sic): Zia, 1938, Ibid. 9(1-2): 16 (Corea).
Acanthoneura melanostoma (sic) Hering, 1941, Sir. Sev. 3: 19-21.
Acanthoneura pteropleuralis (sic): Hering, 1941, Ibid. 3: 21 (Korea).
Acanthoneura pteropleuralis (sic): Chen, 1948, Sinensia 18(1-6): 77 (Korea).
Acanthoneura pteropleuralis (sic): Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1660, f. 4776 (Korea).
Acanthoneura pteropleuralis (sic): Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 2.
Acanthoneura pteropleuralis (sic): Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 221-222, pl. 111(111(13) (Korea).
Acanthoneura pteropleuralis (sic): Aoki, 1966, Comm. Ins. Jap. Col.: 12, pl. 5(37)(Korea).
Acanthoneura pteropleulis (sic): Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 181 (Korea).

Acanthoneura pteropleuralis (sic): Hyun et Woo, 1970, Bull. Seoul Nat. Univ. For. 7: 81[①].
Acanthoneura pteropleuralis (sic): Kim, 1971, Ill. Encycl. Faun. & Flor. Kor. 12: 897-898 (Korea).
Acanthonevra formosana (nec Enderlein): Hardy, 1973, Pac. Ins. Mon. 31: 85-87 (Korea)
Acanthonevra formosana (nec Enderlein): Hardy, 1977, Cat. Dipt. Or. Reg. 3: 61 (Korea).
Lenitovena pteropleuralis: Ito, 1984a, Jap. Bohrfl. 2: 55-56 (Korea).

Type-locality: U.S.S.R. (Maritime Territory).

Description: Head yellow to yellowish brown; frons narrower than eye, orange yellow anteriorly, furnished with black hairs; or-bristles 2: 1, oc-bristles short; lunula pale yellow and deeply concave; face pale yellowish brown to yellow, with arista long plumose; gena with 1 gebristle, slightly narrower than 3rd antennal segment.

Thorax yellowish; mesonotum with 5 dark brown stripes which fused altogether posteriorly; scutellum dark brown with apex pale, having 6 sc-bristles, among them the middle pair conspicuously short; mesophragma shining dark brown with yellowish brown broad median streak.

Wing mostly dark brown, with anterior and posterior hyaline parts; pterostigma dark brown with hyaline basal streak, r1 with a large triangular hyaline streak extending to r3, r4 with a hyaline spot mesally.

Abdomen shining yellow basally, dark brown distally; basal segment of ovipositor flat, brown basally, slightly longer than basal width and the same length with 3 preceding tergites put together.

Length: Body 6.5-8 mm, wing 6.5-7.5 mm.

Locality: GB: : Mt. P'algongsan.
GG : Kwangnŭng (=Koryo [①]).
GN : Mt. Chirisan (=Mt. Jiri [②]).
GW : Mt. Odaesan, Mt. Sŏlaksan.
JN : Mt. Chogyesan.

Distribution: Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu), China (Manchuria), U.S.S.R. (Maritime Territory).

Host: Unknown.

Genus 7. ***Erectovena*** Ito, 1984

Type-species: *Rioxoptilona speciosa* Hendel, 1915
Type-locality: China (Taiwan).

8. ***Erectovena speciosa* (Hendel, 1915)**

Rioxoptilona speciosa Hendel, 1915, Ann. Mus. Nat. Hung. 13: 445, pl. 8(6).
Rioxoptilona speciosa: Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 307-309.
Rioxoptilona speciosa: Chen, 1948, Sinensia 18(1-6): 78.
Rioxoptilona speciosa: Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 2.
Acanthonevra speciosa: Hardy, 1977, Cat. Dip. Or. Reg. 2: 63.
Erectovena speciosa: Ito, 1984a, Jap. Bohrfl. 2: 59-61.

Type-locality: China (Taiwan).

Description: Head yellow to yellowish brown; frons narrower than eye, with brown streak, furnished with black short hairs distally; or-bristles 2: 2; 2 oc-bristles short; lunula pale yellow; face pale yellow; antenna shorter than face, 3rd segment brown, twice as long as wide, with arista long plumose; gena with 1 ge-bristle, nearly as wide as 3rd antennal segment; occiput with a black transverse band mesally, a black spot present on each top of eye.

Thorax yellowish brown; mesonotum ochreous with dark brown stripes; pleura with dark brown stripes; scutellum with 2 dark brown basal spots and 2 black larger marginal spots,having 6 sc-bristles, among them the middle pair conspicuously short; mesophragma shining dark brown with a brown median streak.

Wing mostly dark brown except anterior and posterior proximal parts; r1 with a triangular hyaline spot reaching to R_{2+3} which is rather straight, r5 with 2 hyaline spots.

Abdomen yellowish brown with black markings on dorsum and lateral sides; basal segment of ovipositor black, flat, about as long as 3 preceding tergites put together.

Length: Body 6-7 mm, wing 7 mm.

Locality: GB : Mt. P'algongsan.
JN : Mt. Mudungsan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu, Shikoku), China (Taiwan), Indonesia (Java).

Host: Unknown.

Tribe Gastrozonini

Genus 8. *Acrotaeniostola* Hendel, 1914

Type-species: *Acrotaeniostola sexvittata* Hendel, 1915
Type-locality: China (Taiwan)

9. *Acrotaeniostola scutellaris* (Matsumura, 1916)

Trypeta scutellaris Matsumura, 1916, Thous. Ins. Jap. Add. 2: 415-416, pl. 23(12).
Acrotaeniostola scutellaris: Bezzi, 1925, Bull. Lab. Zool. Prot. 18: 263.
Acrotaeniostola sexvittata (partim nec Hendel): Hendel, 1927, Flieg. pal. Reg. 49: 64.
Acrotaeniostola sexvittata (nec Hendel): Matsumura, 1931, 6000 Ill. Ins. Jap.-Emp.: 370.
Acrotaeniostola sexvittata var. *scutellaris:* Shiraki, 1932, Icon. Ins. Jap.: 32, f. 56.
Acrotaeniostola scutellaris: Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 148-149.
Acrotaeniostola sexvittata (partim nec Hendel): Chen, 1948, Sinensia 18 (1-6): 72.
Acrotaeniostola scutellaris: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1666, f. 4794.
Acrotaeniostola scutellaris: Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 3.
Acrotaeniostola scutellaris: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 222, pl. 111(15).
Acrotaeniostola scutellaris: Aoki, 1966, Comm. Ins. Jap. Col.: 12, pl. 5(32).
Acrotaeniostola antennata Shiraki, 1968, U.S. Nat. Mus. Bull. 263: 49-52, pl. 19.
Acrotaeniostola flavoscutellata (partim) + *A. sexvittata* (nec Hendel): Hardy, 1973, Pac. Ins. Mon. 31: 30-31.

Acrotaeniostola scutellaris: Kim et Kim, 1974, Rep. Kor. Ass. Cons. Nat. 8: 122 ①.
Acrotaeniostola sexvittata (nec Hendel): Hardy, 1977, Cat. Dipt. Or. Reg. 3: 89.
Acrotaeniostola scutellaris: Ito, 1977, Col. Ill. Ins. Jap. 2: 262, pl. 51(895).
Acrotaeniostola scutellaris: Ito, 1984a, Jap. Bohrfl. 2: 70-71.

Type-locality: Japan.

Description: Head brownish; frons rather parallel-sided, slightly narrower than eye; or-bristles 2: 3, vertical callus very long, extending to middle of frons; 2 oc-bristles well developed; lunula very narrow; face pale yellow; antenna as long as face, 3rd segment slender, nearly 3 times as long as wide, with dorsal side weakly concave distally in lateral shape, arista long plumose; gena with 3 strong ge-bristles, narrow, about half as wide as 3rd antennal segment.

Thorax yellowish brown with mesonotum dark brown; scutellum greyish yellow, with 4 sc-bristles; mesophragma shining black.

Wing comparatively large, hyaline with dark brown to brown costal band and 5 transverse bands, of which 2nd and 4th transverse bands continuous to costal band, 2nd and 3rd often fused with each other posteriorly.

Abdomen dark brown to black; basal segment of ovipositor long and flat, about as long as 4 preceding tergites put together.

Length: Body 5.5-7 mm, wing 5.5-7 mm.

Locality: JJ : Mt. Hallasan.
JN : Mt. Paegyangsan ①, Mt.Turyunsan.

Distribution: Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Ryukyus).

Host: Bamboo.

Tribe **Trypetini**

Genus 9. ***Anomoia*** Walker, 1835

Type-species: *Trypeta gaedii* Meigen, 1830
Type-locality: Europe.

Key to species of *Anomoia*

1. Mesonotum mostly dark brown, without prominent longitudinal stripes; r-cell of wing lacking hyaline spot . . . . . ***Anomoia permunda***
   –. Mesonotum brown, with 3 dark brownish longitudinal stripes which are strikingly narrow and parallel one another; r-cell of wing with a hyaline spot . . ***Anomoia vulgaris***

10. *Anomoia permunda* (Harris, 1776)

Musca permunda Harris, 1776, Exp. Engl. Ins. 74: pl. 21(6).
Trypeta antica Wiedemann, 1830, Auss. Zweifl. Ins. 2: 511.
Trypeta gaedii Meigen, 1830, Syst. Beschr. Zweifl. Ins. 6: 382-383.
Phagocarpus permundus: Rondani, 1870, Bull. Soc. Ent. Ital. 3: 171-172.

Tephritis oxyacanthae Perris, 1876, Ann. Soc. Ent. Franc. 16: 211.
Phagocarpus permundus: Hendel, 1927, Flieg. pal. Reg. 49: 94-95, pl. 5(4).
Phagocarpus permundus: Shiraki, 1932, Icon. Ins. Jap.: 34.
Phagocarpus purmundus (sic): Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 184-186.
Phagocarpus purmundus (sic): Zia, 1937, Sinensia 8(2): 146-147.
Phagocarpus permundus: Zia, 1938, Ibid. 9(1-2): 24.
Phagocarpus permundus: Wu, 1940, Cat. Ins. Sin. 5: 442.
Phagocarpus permundus: Chen, 1948, Sinensia 18(1-6): 75.
Phagocarpus purmundus (sic): Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1665, f. 4791.
Anomoia permunda: Colyer et Hammond, 1951, Flies Brit. Isl.: 188-189, pl. 57(1).
Phagocarpus purmundus (sic): Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 4.
Phagocarpus permundus: Richter, 1970, Keys Ins. Eur. U.S.S.R. 5: 148-149.
Phagocarpus permundus: Dirlbek et Dirlbekova, 1971, Act. Faun. Ent. Mus. Nat. Prag. 14 (167): 165.
Phagocarpus permundus: Kandybina, 1972, Ent. Oboze. 51(4): 916-917.
Phagocarpus permundus: Richter, 1975, Ins. Mong. 3: 589.
Anomoia permunda: Ito, 1984a, Jap. Bohrfl. 2: 77-78.

Type-locality: England.

Description: Head yellowish brown; frons slightly narrower than eye, weakly narrowed anteriorly; or-bristles 2: 3, the upper ori arising from next middle portion of frons; 2 oc-bristles very short; lunula small, concolorus with frons; face light brown; antenna about as long as face, 3rd segment 3 times as long as wide, with arista shortly pubescent; gena very narrow, nearly half as wide as 3rd antennal segment, with 1 ge-bristle.

Thorax yellowish brown to brown; mesonotum dark brown, lacking longitudinal stripes; scutellum markedly compressed, dark reddish brown, with 4 sc-bristles; mesophragma shining black.

Wing dark brown basally, hyaline distally, with dark brown narrow bands, outer band narrowly interrupted at the base of r5; c1 with a hyaline spot mesally; m-cu strongly oblique and produced posteriorly.

Abdomen broader than thorax, shining black; basal segment of ovipositor short, about as long as the preceding tergite.

Length: Body 5-6 mm, wing 5-6 mm.

Locality: GB : Mt. P'algongsan.
JJ : Mt. Hallasan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu, Shikoku), China (Kansu, Kingyang, Shensi, Szechwan), Mongolia, Europe.

Host: Unknown in Korea, but it has been reported that the larvae feed on fruits of *Carataegus* sp., *Cotoneaster* sp., and *Sorbus* sp., in Europe.

11. ***Anomoia vulgaris* (Shiraki, 1933)**

Phagocarpus vulgaris Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 190-192, pl. 5(2).

Phagocarpus vulgaris: Chen, 1948, Sinensia 18(1-6): 75.
Phagocarpus vulgaris: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1664, f. 4790.
Phagocarpus vulgaris: Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 4.
Phagocarpus vulgaris: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 222, pl. 111(6).
Anomoia vulgaris: Hardy, 1977, Cat. Dipt. Or. Reg. 3: 106.
Anomoia vulgaris: Ito, 1977, Col. Ill. Ins. Jap. 2: 262, pl. 51(894).
Anomoia vulgaris: Ito, 1984a, Jap. Bohrfl. 2: 81-82.

Type-locality: Japan and China (Taiwan).

Description: Head yellowish brown to brown; frons slightly narrower than eye, very weakly narrowed anteriorly; or-bristles 2: 3, comparatively strong, the upper ori arising from next middle portion of frons; 2 oc-bristles moderate; lunula yellowish brown; face brown; antenna shorter than face, 3rd segment 2.2 times as long as wide, arista shortly pubescent; gena slightly narrower than 3rd antennal segment, with 1 ge-bristle.

Thorax yellowish brown; mesonotum brown, with 3 dark brownish longitudinal stripes which are strikingly narrow and parallel one another; scutellum markely compressed, with 4 sc bristles; mesophragma shining reddish brown, with a dark brown to black median streak.

Wing dark brown basally, hyaline distally, with dark brown narrow bands, outer band rather broadly interrupted at the base of r5; pterostigma mostly dark brown; r1 with a hyaline spot.

Abdomen yellowish brown to brown, with dark brown markings on dorsum apically; basal segment od ovipostor shining black, about as long as the peceding tergite.

Length: body 5-6 mm, wing 5-6 mm.

Locality: JJ : Mt. Hallasan.

Distribution: Korea (new record), Japan (Honshu, Shikoku, Kyushu), China (Chekiang, Taiwan).

Host: Unknown.

Genus 10. *Vidalia* Robineau-Desvoidy, 1830

Type-species: *Vidalia impressifrons* Robineau-Desvoidy, 1830
Type-locality: India.

12. *Vidalia koreana* sp. nov.

Description: Head yellowish brown; frons about 1.3 times as wide as eye, slightly concave longitudinally, somewhat parallel-sided; or-bristles 1: 3, the upper ori arising from 3/5 of frons and closer to ors than to middle ori; oc-bristles entirely reduced; lunula semicircular, deeply concave, concolorous with frons; face pale yellowish; antenna apparently shorter than face, 3rd segment about 2.2 times as long as wide, with arista shortly pubescent; gena with yellow 1 ge-bristle.

Thorax yellowish brown; mesonotum with a pair of black short streak between scp-bristles, which continuously stretched to posterior margins as obscure reddish brown stripes; scutellum with 4 sc-bristles; mesophragma shining black, with a brown median stripe.

Wing hyaline with yellowish markings; r1 with a triangular hyaline streak; r3 and r5 with apex dark brown obliquely; m-cu with dark brown pattern; R_{4+5} and M very slightly convergent apically.

Abdomen yellowish brown, without any prominent markings; basal segment of ovipositor flat, a little longer than the preceding tergite.

Length: Body 6 mm, wing 5.8 mm.

Type-examined: Holotype female, Mt. P'algongsan, GB, S. Korea, 2, VII, 1982, coll. Y.J. Kwon.

Host: Unknown.

Remark: This new species resembles *Vidalia montivaga* Ito, 1984, from Japan but can be separable from the latter by the less convergent R_{4+5} and M of wing in female.

Genus 11. ***Pogonangelus*** Ito, 1984

Type-species: *Pogonangelus pachypogon* Ito, 1984
Type-locality: Japan.

13. ***Pogonangelus assimilis*** **sp. nov.**

Description: Head yellowish brown; frons about 1.5 times as wide as eye, rather parallel-sided, slightly concave before antennal triangle, furnished with dark brown hairs anteromesally, border of lunula brown; or-bristles 2: 3, strong; 2 oc-bristles strong, well developed; lunula somewhat paler; face pale yellowish brown, with antennal groove deep; antenna apparently shorter than face, 3rd segment about 1.8 times as long as wide, with arista moderately pubescent; gena nearly half as high as eye, with 3 strong ge-bristles.

Thorax yellowish brown; mesonotum without any prominent dark markings; pleura with pale yellowish streak from humeral callus to wing base; scutellum with 4 sc-bristles; mesophragma concolorous.

Wing hyaline with brown to dark brown markings; pterostigma dark brown; a hyaline short transverse band present next to pterostigma which extending to the junction of R_{4+5} and r-m; a hyaline longer transverse band present from costal margin to posterior margin, which interrupted at Cu.

Abdomen mostly yellowish brown; basal segment of ovipositor shining dark brown, slightly shorter than 2 preceding tergites put together.

Length: Body 5.8 mm wing 6.2 mm.

Type-examined: Holotype female, Kwangnŭng, GG, C. Korea, 10, VI, 1973, coll. K.R. Choi.

Host: Unknown.

Remark: The present new species differs from *Pogonangelus pachypogon* Ito, 1984, by the wing pattern.

Genus 12. ***Shiracidia*** Ito, 1984

Type-species: *Trypeta s-nigrum* Matsumura, 1919
Type-locality: Japan.

14. *Shiracidia s-nigrum* (Matsumura, 1916)

Trypeta s-nigrum Matsumura, 1916, Thous. Ins. Jap. Add. 2: 416-417, pl. 23(13).
Genus ? *s-nigrum:* Hendel, 1927, Flieg, pal. Reg. 49: 213.
Trypeta s-nigrum: Matsumura, 1931, 6000 Ill. Ins. Jap.-Emp.: 370.
Acidia (Pseudacidia) takeuchii Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 222-225, pl. 6(3).
Pseudospheniscus iwatensis Shinji, 1939, Ins. World 43: 290.
Pseudacidia takeuchii: Ito, 1945, Mushi 16: 84.
Pseudacidia takeuchii: Ito, 1947a, Matsumushi 2(2): 59.
Pseudacidia takeuchii: Ito, 1949a, Mushi 19(8): 39.
Pseudacidia takeuchii: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1663, f. 4785.
Pseudacidia takeuchii: Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 5.
Pseudacidia s-nigrum: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 222, pl. 111(24).
Shiracidia s-nigrum: Ito, 1984b, Jap. Bohrfl. 3: 112-113.

Type-locality: Japan.

Description: Head yellowish brown; frons wider than eye; or-bristles 2: 4 to 2: 6; 2 oc-bristles short; lunula narrow, crescent; face pale yellowish brown; antenna apparently shorter than face, 3rd segment twice as long as its basal width, with dorsal side gently concave; arista shortly pubescent; gena about a quarter times as high as eye, with 1 black ge-bristle.

Thorax yellowish brown; mesonotum with a pair of dark brown short streak between scp-bristles; scutellum convex, with 4 sc-bristles; mesophragma shining dark brownish, with a brown median band.

Wing mostly yellow, with dark brown conspicuous markings; pterostigma dark brown; 2 transverse band fused with each other at posterior margin; apical dark brown marking fused with outer transverse band at costal area.

Abdomen entirely yellowish brown, furnished black hairs; basal segment of ovipositor concolorous with abdomen, a little longer than the preceding tergite.

Length: Body 7-9 mm, wing 7-9 mm.

Locality: GW : Mt. Sŏlaksan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu, Shikoku, Kyushu), U.S.S.R. (Sachalin).

Host: Unknown.

Genus 13. ***Magnimyiolia*** Shiraki, 1933

Type-species: *Magnimyiolia jozana* Shiraki, 1933
Type-locality: Japan.

15. ***Magnimyiolia interrupta* sp. nov.**

Description: Head bright yellowish brown, higher than long (3: 2) and rectangular in profile; frons prominently protrudent anteriorly and convex with lateral margins divergent anteriorly.

or-bristles 2: 3, strong, ori directing forwards; 2 oc-bristles moderate; lunula comstrong, ori directing forwards; 2 oc-bristles moderate; lunula comparatively large, vertical, somewhat nail-like; face pale yellowish, conspicuously large; antenna reaching to before middle of face, 3rd segment twice as long as wide, with arista finely plumose; gena apparently wider than 3rd antennal segment, with 1 ge-bristle.

Thorax yellowish brown; mesonotum ochreous, without any prominent dark markings; scutellum yellowish brown, with 4 sc-bristles; a black spot present on the wing base; meso-phragma shining yellowish brown.

Wing mostly yellowish hyaline, with conspicuous dark brown markings distally; apices of r1, r3, and r5 dark brown, fused with a transverse dark brown band on m-cu; median dark brown transverse band fused with outer one posteriorly, somewhat interrupted at middle of 1m 2; apex of anal cell with an obscure dark brown patch; R_{4+5} bristled on both sides basally.

Abdomen mostly ochreous, without any prominent dark markings.

Length: Body 7.6 mm, wing 7.8 mm.

Type-examined: Holotype male, Mt. Sobaeksan, GB, S. Korea, 1, VIII, 1977, coll. S.M. Lee.

Host: Unknown.

Remark: The present new species closely resembles *Magnimyiolia sigmoidea* Ito, 1984, in general appearance, but can be separable from the latter by the longer 3rd antennal segment and the wing pattern.

Genus 14. *Paragastrozona* Shiraki, 1933

Type-species: *Gastrozona japonica* Miyake, 1919
Type-locality: Japan.

16. *Paragastrozona japonica* (Miyake, 1919)

Gastrozona japonica Miyake, 1919, Bull. Imp. Centr. Agr. Exp. Stat. Jap. 2: 152-154, pl. 9(4).
Gastrozona japonica var. *miyakei* Bezzi, 1925, Boll. Lab. Zool. Port. 18: 265.
Gastrozona japonica: Hendel, 1927, Flieg. pal. Reg. 49: 63, pl. 2(12).
Paragastrozona japonica: Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 154-156.
Paragastrozona japonica var. *miyakii* (sic): Munro, 1935, Arb. Phys. Ang. Ent. Berl. 2: 203.
Paragastrozona japonica miyakei: Chen, 1948, Sinensia 18(1-6): 73.
Paragastrozona japonica: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1665, f. 4693.
Paragastrozona japonica: Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 2.
Paragastrozona japonica: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 222, pl. 111(17).
Paragastrozona japonica: Ito, 1977, Col. Ill. Ins. Jap. 2: 262, pl. 51(896).
Paragastrozona japonica: Ed. Dep. Hok., 1979, (Ill. Ins. Jap. Stud. ed.): 295, f. 1665.
Paragastrozona japonica: Ito, 1984b, Jap. Bohrfl. 3: 132-135.

Type-locality: Japan.

Description: Head yellowish brown, slightly higher than long (♂: 5.5); frons prominently produced anteriorly, 1.5 times as wide as eye; or-bristles 2: 3, ori directing forwards; 2 oc-

bristles strong and long; lunula small, pale yellow; face pale yellow; antenna extending to before oral margin, 3rd segment 2.5 times as long as wide, with arista shortly plumose; gena about 0.3 times as high as eye, with 1 ge-bristle.

Thorax yellowish brown; mesonotum mostly dark brown, with a pair of longitudinal silver bands, scutellum strongly convex, apex often dark brown, with 4 sc-bristles; mesophragma shining dark brown.

Wing hyaline, with 5 brown radial bands, of which 1st, 2nd, and 4th are fused at costal area; apices of pterostigma and r1 hyaline; R_{4+5} bristled to subapex on dorsal side, and only basally on ventral side.

Abdomen ochreous, with dark brown markings on dorsum; basal segment of ovipositor dark brown apically, with a pair of short conical processes laterally, about as long as 3 preceding tergites put together.

Length: Body 5.5-8 mm, wing 5.5-8 mm.

Locality: GN : Mt. Chirisan, Mt. Kajisan, Mt. Wŏnhyosan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu, Shikoku, Kyushu).

Host: Bamboo grass.

Genus 15. ***Parahypenidium*** Shiraki, 1933

Type-species: *Hypenidium polyfasciatum* Miyake, 1919
Type-locality: Japan.

17. *Parahypenidium polyfasciatum* (Miyake, 1919)

Hypenidium polyfasciatum Miyake, 1919, Bull. Imp. Centr. Agr. Exp. Stat. Jap. 2: 149-150, pl. 10(3).
Hemilea polyfasciata: Hendel, 1927, Flieg. pal. Reg. 49: 100, pl. 2(9).
Parahypenidium polyfasciata: Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 205-207.
Parahypenidium polyfasciata: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1663, f. 4787.
Parahypenidium polyfasciatum: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 222, pl. 111 (19).
Parahypenidium polyfasciatum: Ed. Dep. Hok., 1979, Ill. Ins. Jap. Stud. ed.: 296, f. 1666.
Parahypenidium polyfasciatum: Ito, 1984b, Jap. Bohrfl. 3: 117-118.

Type-locality: Japan.

Description: Head yellowish brown; frons slightly wider than eye, somewhat parallel-sided; or-bristles 2: 3, ori directing forwards; 2 oc-bristles short; lunula light in tint, deeply concave; face with antennal groove deep; antenna brown, apparently shorter than face, 3rd segment 1.8 times as long as wide, with arista shortly pubescent; gena wider than 3rd antennal segment, with 1 blackish strong ge-bristle.

Thorax yellowish brown; mesonotum ochreous, with 2 pairs of dark brown to black longitudinal stripes, the outer one interrupted at suture; scutellum convex, with 4 sc-bristles; mesophragma shining dark brown.

Wing with anterior half dark brown and extending to apex, posterior remainder hyaline; pterostigma apparently longer than c1; a hyaline spot present adjacent to apex of pterostigma; R_{4+5} bristled on dorsal side.

Abdomen with conspicuous dark brown markings; basal segment of ovipositor shining black, longer than the preceding tergite.

Length: Body 8-9 mm, wing 8-9 mm.

Locality: JB : Mt. Taedunsan. pan (Hokkaido, Honshu, Shikoku, Kyushu).

Host: *Clerodendrum trichomum.*

Genus 16. ***Pseudhemilea*** Chen, 1948

Type-species: *Acidiella (Pseudhemilea) nudiarista* Chen, 1948
Type-locality: China.

18. ***Pseudhemilea longistigma*** (Shiraki, 1933)

Hemilea longistigma Shiraki, 1933, Mem. fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 201-203, pl. 5(4).
Acidiella (Pseudacidia) longistigma: Chen, 1948, Sinensia 18(1-6): 77.
Hemilea longistigma: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1664, f. 4789.
Acidiella longistigma: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 223, pl. 112(7).
Hemilea longistigma; Hardy, 1977, Cat. Dipt. Or. Reg. 3: 109.
Pseudhemilea longistigma: Ito, 1984b, Jap. Bohrfl. 3: 123-124.

Type-locality: Japan.

Description: Head yellowish brown; frons slightly wider than eye, somewhat parallel-sided, strikingly protrudent anteriorly; or-bristles 2: 3, ori directing forwards, upper ori slightly closer to lower ors than to middle ori; 2 oc-bristles moderately short; lunula pale yellowish, rather vertical; face long, pale yellowish; antenna slightly exceeding middle of face, 3rd segment 2.5 times as long as its basal width, with arista nearly bare at proximal half, shortly pubescent at distal half; gena narrower than 3rd antennal segment; ge-bristle entirely absent.

Thorax yellowish brown; mesonotum ochreous, with a pair of prominent black longitudinal bands; scutellum convex, with 4 sc-bristles; mesophragma shining yellowish brown, with a pair of dark brown patches.

Wing with anterior 3/5 dark brown, posterior remainder hyaline; c1 slightly hyaline distomesally, r1 with a hyaline spot next to apex of pterostigma; m-cu with an obscure dark brown streak; R_{4+5} bristled on dorsal side.

Abdomen yellowish brown, without any prominent markings; basal segment of ovipositor ochreous, 1.4 times as long as the preceding tergite.

Length: Body 4.8-5.1 mm, wing 4.8-5.2 mm.

Locality: GN : Mt. Kajisan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu), China (Taiwan, Yunnan), Burma.

Host: The larvae are leaf miners of *Aralia elata.*

Genus 17. ***Hemilea*** Loew, 1862

Type-species: *Trypeta dimidata* Costa, 1837
Type-locality: Italy.

Key to species of *Hemilea*

1. Wing gradually narrowed distally, with apex deep round; posterior hyaline part with an obscure fuscous transverse band along m-cu . . . . . ***Hemilea infuscata***
   –. Wing relatively broad, with apex oblique round; posterior hyaline part with 2 obscure fuscous transverse bands . . . . . ***Hemilea nabiae*** sp. nov.

19. *Hemilea infuscata* Hering, 1937

Hemilea dimidiata infuscata Hering, 1937a, Mitt. Deutsch. Ent. Ges. E. V. 8(4): 57.
Hemilea dimidiata (nec Costa: Zia, 1938, Sinensia 9(1-2): 25-26.
Hemilea dimidiata (partim nec Costa) + *H. D. infuscata:* Chen, 1948, Sinensia 18(1-6): 74-75.
Hemilea dimidiata (nec Costa): Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1664, f. 4788.
Hemilea dimidiata (nec Costa): Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 4.
Hemilea infuscata: Sasakawa, 1955, Kontyu 22: 53-55, pl. 4 (1-2).
Hemilea infuscata: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 222, pl. 111(20).
Hemilea infuscata: Ito, 1977, Col. Ill. Ins. Jap. 2: 262, pl. 51(897).
Hemilea infuscata: Ed. Dep. Hok., 1979, (Ill. Ins. Jap. Stud. ed.): 296, f. 1667.
Hemilea infuscata: Ito, 1984b, Jap. Bohrfl. 3: 140-141.

Type-locality: China (Manchuria).

Description: Head yellowish brown; frons as wide as eye, rather parallel-sided, not protrudent anteriorly; or-bristles 2: 3, ori directing backwards; 2 oc-bristles moderate in length; lunula brown; face pale yellowish brown; antenna slightly exceeding middle of face, 3rd segment twice as long as wide, with arista shortly pubescent; gena slightly wider than 3rd antennal segment, with 1 ge-bristle.

Thorax yellowish brown; mesonotum shining ochreous, without any prominent dark markings; scutellum ochreous, strikingly compressed, with 4 sc-bristles; mesophragma shining ochreous, lacking any dark markings.

Wing with anterior 3/5 dark brown, posterior remainder hyaline; r1 with a hyaline spot next to pterostigma; r5 with an obscure hyaline longitudinal stripe distally; R_{4+5} bristled basally on both sides.

Abdomen yellowish brown, with prominent dark brown marking on dorsum; basal segment of ovipositor about as long as the preceding tergite.

Length: Body 4-5 mm, wing 4-5 mm.

Locality: GB : Is. Ullŭngdo.

Distribution: Korea (new record), Japan (Hokkaido, Honshu, Shikoku, Kyushu), China (Chekiang, Manchuria, Shansi, Shantung).

Host: The larvae are leaf miners of dandelion *(Taraxacum platycarpum).*

20. *Hemilea nubica* sp. nov.

Description: Head yellowish brown; frons slightly wider than eye, somewhat parallel-sided, with black fine hairs; or-bristles 2: 3, ori directing backwards; 2 oc-bristles short; lunula concolorous with frons, concave; face pale yellowish brown; antenna reaching to 3/4 of face, 3rd segment 1.6 times as long as wide, with arista shortly pubescent; gena narrow, with 1 ge-bristle black.

Thorax yellowish brown; mesonotum shining ochreous, with 2 pairs of obscure reddish brown stripes; scutellum ochreous, conspicuously compressed, with 4 sc-bristles; mesophragma shining brown to ochreous, without any dark markings.

Wing with anterior 2/3 dark brown, posterior remainder hyaline with 2 obscure fuscous transverse streaks of which the outer one present along m-cu; r1 with a very dim to hyaline spot next to pterostigma; R_{4+5} bristled on basal half of dorsal side, several bristles also present at the base of ventral side.

Abdomen with dorsum shining black except each basal side in female, large dark brown patch present in male; venter yellowish brown; basal segment of ovipositor flat, about as long as the preceding tergite.

Length: Body 4-4.5 mm, wing 5 -5.5 mm.

Type-examined: Holotype female, Mt. Chuwangsan, GB, S. Korea, 26, VII, 1984, on *Vitis amurensis*, coll. Y.J. Kwon; paratype: 1 male, same data as holotype.

Host: Probably feeding on wild grapes.

Remark: The present new species is closely allied to *Hemilea dimidiata* (Costa, 1837) from Europe, but distinguished by the more extending dark brown pattern of wing from the latter.

Genus 18. *Kwasilparia* gen. nov. (gender: neuter)

Type-species: *Kwasilparia multipilosa* gen. et sp. nov.
Type-locality: Korea.

Diagnosis: Head in profile slightly higher than long, strongly convex laterally, 1.7 times as wide as long in dorsal aspect; frons rectangular, wider than eye, entirely not protrudent anteriorly and as the same level with eye margin; or-bristles 2: 5, ori directing backwards; profrons very narrow; face shorter than its lower margin; antenna with arista plumose; parafacialia not developed; gena relatively narrow, continuously swollen with lower occiput, having 1 ge-bristle.

Thorax with ppl-bristles yellowish brown; lower mpl-bristles shorter than upper one; scutellum slightly convex, with 4 sc-bristles, furnished with fine hairs peripherally.

Wing with R_{4+5} bristled on dorsal side, ventral base only furnished with several bristles; pterostigma much shorter than c1; R_{2+3} more or less straight, bare on both sides; R_{4+5} and M rather parallel distally.

Abdomen slightly narrower than thorax; basal segment of ovipositor short and flat, trapezoid.

Remark: This new genus may be apparently separable from other related genera by 5 ori-bristles directing backwards.

21. *Kwasilparia multipilosa* gen. et sp. nov.

Description: Head yellowish brown; frons slightly wider than eye, weakly divergent apically, broadly concave, bearing brownish fine hairs; or-bristles 2: 5, ori directing backwards; 2 oc-bristles as strong as upper ors; lunula comparatively large, pale yellowish brown; face pale yellow, markedly short; antenna reaching to before oral margin, 3rd segment brownish and 1.8 times as long as wide, with arista shortly plumose; gena with 1 ge-bristle rather weak.

Thorax yellowish brown; mesonotum without any dark markings; scutellum slightly convex, with 4 sc-bristles; mesophragma yellowish brown.

Wing hyaline, with prominent dark brown markings; base mostly hyaline, apex dark brown; pterostigma dark brown; r1 with 2 hyaline bands extending to r3, the outer one also extending to r5, another hyaline band extending from r5 to 2 m 2; R_{4+5} bristled on dorsal side, ventral base only furnished with 2-3 bristles.

Abdomen entirely yellowish brown; basal segment of ovipositor dark brown with a median brown streak on dorsum, rather longer than the preceding tergite.

Length: Body 5 mm, wing 5.5 mm.

Type-examined: Holotype female, Mt. Odaesan, GW, C. Korea, 3, VIII, 1983, coll. Y.J. Kwon.

Host: Unknown.

Remark: The present new species can be easily distinguished by the presence of 5 ori-bristles directed backwards from other similar groups.

Genus 19. ***Syusiroitoa*** gen. nov. (gender: masculine)

Type-species: *Syusiroitoa maculipennis* gen. et sp. nov.
Type-locality: Korea.

Diagnosis: Head in profile higher than long, strongly convex laterally; about 1.5 times as wide as long in dorsal aspect; frons rectangular, of same width of eye, not protrudent anteriorly and nearly as the same level with eye margin; or-bristles 2: 3, ori directing backwards; profrons much narrower than 3rd antennal segment; face slightly shorter than its lower margin; antenna with arista plumose; parafacialia very weakly developed; gena relatively narrow, with a ge-bristle.

Thorax with ppl-bristles black; lower mpl-britles shorter than upper one; scutellum moderately convex, with 4 sc-bristles, furnished with a few fine hairs peripherally.

Wing with R_{4+5} bristled on dorsal side, ventarl base only furnished with several bristles; pterostigma much shorter than c1; R_{2+3} more or less straight, bare on both sides; R_{4+5} and M rather parallel each other.

Abdomen slightly wider than thorax; basal segment of ovipositor short and flat, trapezoid.

Remark: This new genus can be distinguished by the ori-bristles from superficially resembled genera having the similar wing pattern.

22. ***Syusiroitoa maculipennis*** **gen. et sp. nov.**

Description: Head yellowish brown; frons as wide as eye, rather parallel-sided, broadly concave longitudinally, bearing black fine hairs; or-bristles 2: 3, ori directing backwards; 2 oc-bristles weak, much shorter than upper ors; lunula small, deep concave; face pale yellowish brown; antenna reaching to 2/3 of face, 3rd segment nearly twice as long as wide, with arista plumose;

gena with 1 ge-bristle moderate and black.

Thorax yellowish brown; mesonotum ochreous, with a pair of large black markings posterior portion pale yellowish; pleura with a pale yellow band; scutellum convex, mostly pale yellowish, with 4 sc-bristles; mesophragma shining dark brown to black.

Wing hyaline, with prominent dark brown markings; c1 hyaline, with dark brown patches on middle and base; r1 with 2 hyaline spots, the outer one continuous to large patch of 1 m 2; R_{4+5} bristled on dorsal side except distal part, base only furnished with several bristles.

Abdomen yellowish brown, with prominent dark brown markings; basal segment of ovipositor mostly dark brown, slightly longer than the preceding tergite.

Length: body 4.5-5 mm, wing 5-5.5 mm.

Type-examined: Holotype female, Mt. Wŏnhyosan, GN, S. Korea, 6, VI, 1981, coll. Y.J. Kwon; Paratypes, 3 males, Kwangnŭng, GG, C. Korea, 10, VI, 1973, coll. J.C. Paik.

Host: Unknown.

Remark: The present new species differs from other similar groups by the 3 ori-bristles directed backwards.

Genus 20. *Trypeta* Meigen, 1803

Type-species: *Musca artemisiae* Fabricius, 1794
Type-locality: Denmark.

Key to species of *Trypeta*

1. Wing with 2 dark brown transverse bands mesally, outer one interrupted or obscure at r3, inner one not reaching to the posterior margin; mesophragma black with a brownish narrow median streak . . . . . *Trypeta artemisiae*
   —. Wing with 2 dark brown transverse bands mesally, outer one not interrupted at r3, inner one weak, but extending to the posterior margin . . . . . *Trypeta artemisicola*

23. *Trypeta artemisiae* (Fabricius 1794)

Musca artemisiae Fabricius, 1794, Ent. Syst. 4: 351.
Tephritis artemisiae: Fabricius, 1805, Syst. Antl.: 317.
Tephritis interrupta Fallen, 1814, K. Svensk. Acad. Handl. 35: 163.
Trypeta artemisiae: Meigen, 1826, Syst. Beschr. 5: 314, pl. 48(20).
Forellia onopordi Robineau-Desvoidy, 1830, Mem. Pres. div. Sav. Acad. Sci. Inst. Franc. 2: 271.
Spilographa artemisiae: Loew, 1862, Eur. Bohrfl.: 41, pl. 5(1).
Phorellia artemisiae: Rondani, 1870, Dipt. Ital. Prodr. 7(4): 28.
Trypeta artemisiae: Matsumura, 1916, Thous. Ins. Jap. Add. 2: 417, pl. 23(14).
Trypeta artemisiae: Hendel, 1927, Flieg. pal. Reg. 49: 78-79.
Trypeta artemisiae: Matsumura, 1931, 6000 Ill. Jap.-Emp.: 369.
Myiolia flavonigra (partime): Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 266-268.

Trypeta artemisiae: Hering, 1937a, Mitt. Deutsch. Ent. Ges. E. V. 8(4): 57-58.
Trypeta artemisiae: Chen, 1948, Sinensia 18(1-6): 73.
Trypeta artemisiae: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 222, pl. 111(21).
Trypeta artemisiae: Richter, 1970, Keys Ins. Eur. U.S.S.R. 5: 147.
Trypeta artemisiae: Richter, 1975, Ins. Mong. 3: 588.
Trypeta artemisiae: Ito, 1984c, Jap. Bohrfl. 4: 146-147 (Korea).

Type-locality: Denmark.

Description: Head yellowish brown; frons wider than eye, rather broad and flat; or-bristles 2: 3, ori directing forwards; 2 oc-bristles short; lunula slightly concave mesally; face light brown; antenna shorter than face, 3rd segment about twice as long as wide, with arista very shortly pubescent; gena wider than 3rd antennal segment, 0.2 to 0.25 times as high as eye, with 1 ge-bristle black.

Thorax yellowish brown; mesonotum ochreous, with 2 pairs of brown stripes; scutellum somewhat flat, with 4 sc-bristles; mesophragma shining black, often with a brown median band.

Wing hyaline, yellowish basally, with 2 dark brown transverse bands mesally of which outer one interrupted or obscure at r3, inner one not reaching to posterior margin; apex dark brown; R and anal cell with a dark brown spot on each apex; R_{4+5} bristled from base to the junction of r-m on dorsal side, bare ventrally.

Abdomen brown; basal segment of ovipositor flat, half as long as its basal width, about as long as the preceding tergite.

Length: Body 5-6 mm, wing 5-6 mm.

Locality: GN : Mt. Chirisan.

Distribution: Korea, Japan (Hokkaido, Honshu), China (Manchuria), Mongolia, Europe.

Host: *Artemisia* spp.

24. *Trypeta artemisicola* Hendel, 1923

Trypeta zoe var. *artemisicola* Hendel, 1923, Deutsch. Ent. Zeitschr.: 398.
Trypeta zoe (nec Meigen): Hendel, 1927, Flieg. pal. Reg. 49: 80, pl. 4 (1, 2).
Trypeta trifasciata Shiraki, 1933, Mem. Fac. Sci. & Agr., Taih. Imp. Univ. 8(2): 270-273, pl. 9(2).
Trypeta trifasciata: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1661, f. 4780.
Trypeta zoe artemisicola: Sasakawa, 1955, Kontyu 22: 54, pl. 4(3-4).
Trypeta artemisicola: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 222, pl. 111(22).
Trypeta artemisicola: Ito, 1984c, Jap. Bohrfl. 4: 147-148.

Type-locality: Europe.

Description: Head yellowish brown; frons slightly wider than eye, somewhat shallowly concave; or-bristles 2: 3, ori directing forwards; 2 oc-bristles moderate, about as long as upper ors; lunula twice as wide as long; face light brown; antenna slightly shorter than face, 3rd segment twice as long as its basal width, with arista shortly pubescent; gena wider than 3rd antennal segment about 0.2 times as high as eye, with 1 ge-bristle black and prominent.

Thorax yellowish brown; mesonotum yellowish brown to ochreous, sometimes with brown markings; scutellum slightly convex, with 4 sc-bristles; mesophragma entirely shining black.

Wing hyaline, yellowish basally, with 2 dark brown transverse bands mesally of which outer one continuously prominent, inner one weak, but extending to posterior margin; apex dark brown; R and anal cell with a dark brown spot on each apex; R_{4+5} bristled from base to the junction of r-m on dorsal side, bare ventrally.

Abdomen brown to ochreous; basal segment of ovipositor flat, nearly as long as the preceding tergite.

Length: Body 4-6 mm, wing 4.5-6 mm.

Locality: GB : Mt. P'algongsan, Mt. Sobaeksan.
GW : Mt. Odaesan, Mt. Solaksan.

Distribution: Korea (new record), Japan (Honshu), U.S.S.R. (Sachalin), Europe.

Host: *Artemisia* spp.

Genus 21. ***Chetostoma*** Rondani, 1856

Type-species: ***Chetostoma curvinervis*** Rondani, 1856
Type-locality: Europe.

25. ***Chetostoma continuans*** Zia, 1938

Chaetostoma continuans (sic): Zia, 1938, Sinensia 9(1-2): 31-32, pl. 1(9).
Chaetostoma continuans (sic): Chen, 1948, Sinensia 18(1-6): 73.

Type-locality: China (Shansi).

Description: Head yellowish brown; frons as wide as eye, shallowly concave mesally; or-bristles 2: 3, ori directing forwards; 2 oc-bristles moderate, about as long as upper ors; lunula narrow; face pale yellowish brown, nearly as high as its lower margin; antenna reaching to 3/4 of face, 3rd segment exceeding twice as long as wide, with arista very shortly plumose; gena narrow, with 1 ge-bristle black and comparatively short; vibrissal edge with numerous strong bristles.

Thorax yellowish brown; mesonotum somewhat ochreous, without any prominent dark markings; scutellum rather flat, concolorous, with 4 sc-bristles; mesophragma ochreous, with a pair of broad dark brown patches.

Wing hyaline, yellowish basally, with a prominent dark brown band which running along anterior apex of C and bent at apical portion of R_{2+3} to Cu; a short and broad subbasal dark brown band also present.

Abdomen ochreous; basal segment of ovipositor shining dark brown, slightly longer than the preceding tergite.

Length: Body 3.6-5 mm, wing 4-5 mm.

Locality: GB : Mt. P'algongsan.

Distribution: Korea (new record), China (Shansi).

Host: Unknown.

Genus 22. ***Phalophylla*** Rondani, 1870

Type-species: *Musca caesio* Harris, 1776
Type-locality: England.

26. *Philophylla marumoi* (Miyake, 1919)

Acidia marumoi Miyake, 1919, Bull. Imp. Centr. Agr. Exp. Stat. Jap. 2: 151-152, pl. 9(4).
Myiolia marumoi: Hendel, 1927, Flieg. pal. Reg. 49: 104, pl. 5(11).
Pseudospheniscus inflatus + *Myiolia marumoi:* Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 171-174, 263-264, pl. 4(4).
Pseudospheniscus inflatus: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1665, f. 4792.
Philophylla marumoi: Ito, 1984c, Jap. Bohrfl. 4: 167-169.

Type-locality: Japan.

Description: Head brown; frons as wide as eye, furnished with black fine hairs; or-bristles 2: 3, strong, ori directing forwards; 2 oc-bristles short; lunula light brown; face dirty yellowish; antenna apparently shorter than face, 3rd segment twice as long as wide, with dorsal side slightly concave, arista shortly plumose; gena narrower than 3rd antennal segment, with 1 ge-bristle black.

Thorax dark brown, with prosternum brown; mesonotum deeply dark brown to black; scutellum slightly convex and concolonous, with 4 sc-bristles; mesophragma deeply dark brown to black.

Wing markedly broad, with prominent dark markings; base hyaline; c1 hyaline mesally; r1 with 2 hyaline bands extending to r3, outer one often reaching to Cu; 2 transverse bands also present apically; R_{2+3} rather wavy; R_{4+5} bristled on dorsal side.

Abdomen dark brown to black throughout; basal segment of ovipositor shining black, flat, slightly longer than the preceding tergite.

Length: Body 4-5 mm, wing 4.5-5.5 mm.

Locality: GW : Mt. Odaesan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu).

Host: Unknown.

Genus 23. *Hendelina* Hardy, 1951

Type-species: *Spheniscus angulatus* Hendel, 1913
Type-locality: China (Taiwan).

27. *Hendelina fossata* (Fabricius, 1805)

Tephritis fossata Fabricius, 1805, Syst. Antl.: 320.
Trypeta fossata: Wiedemann, 1830, Auss. Zweifl. Ins. 2: 503.
Trypeta elimia Walker, 1849, List. Spec. Dipt. Ins. Coll. Brit. Mus. 4: 1033.
Ortalis regularis Doleschall, 1859, Nat. Tijdsch. Ned.-Ind. 17: 119.
Pseudospheniscus fossatus: Hendel, 1915, Ann. Mus. Nat. Hung. 13: 542.
Pseudospheniscus fossatus: Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 169-171.

Euleia fossata: Chen, 1948, Sinensia 18(1-6): 76, 110.
Hendelina fossata: Ito, 1952, Trans. Shikoku Ent. Soc. 3(1): 3.
Anomoia (Euleia) fossata: Hardy, 1959, Bull. Brit. Mus. (Nat. Hist.) Ent. 8(5): 231, pl. 15 (31).
Pseudosplenicus fossatus (sic): Zool. Soc. Kor., 1968, Nom. An. Kor. 2: 181 (Korea).
Pseudospheniscus fossatus: Kim, 1971, Ill. Encycl. Faun. & Flor. Kor. 12: 899 (Korea).
Myoleja fossata: Hardy, 1973, Pac. Ins. Mon. 31: 255-257, pl. 7 (67).
Myoleja fossata: Hardy, 1974, Ibid. 32: 199-200.
Myoleja fossata: Hardy, 1977, Cat. Dipt. Or. Reg. 3: 111.
Hendelina fossata: Ito, 1984c, Jap. Bohrfl. 4: 170-171.

Type-locality: India.

Description: Head yellowish brown to brown; frons as wide as eye, parallel-sided; or-bristles 2: 3, strong, ori directing forwards; 2 oc-bristles nearly as long as upper prs; lunula more concave in male than in female; face brown; antenna shorter than face, 3rd segment brown, twice as long as wide, arista shortly pubescent; gena conspicuously narrow, about half as wide as 3rd antennal segment, with a prominent ge-bristle black.

Thorax deeply dark brown to black; mesonotum black; scutellum rather flat, lighter in tint laterally, with 4 sc-bristles; mesophragma shining black; legs with distal part of tibia and tarsi brownish.

Wing markedly broad, with prominent dark brown markings; costal cell hyaline; r1 with a short hyaline triangular spot extending to r3, and a long transverse band from costal to posterior margins; dark brown narrow band present obliquely at r5; R_{4+5} bristled on basal half of dorsal side.

Abdomen shining black; basal segment of ovipositor slightly longer than the preceding tergite.

Length: Body 4-6 mm, wing 4.5-6 mm.

Locality: JN : Mt. Chogyesan.

Distribution: Korea, Japan (Honshu, Shikoku, Kyushu, Ryukyus), China (Chekiang, Yunnan, Taiwan), Burma, Philippines, Indonesia, India.

Host: Unknown.

Genus 24. ***Fusciludia*** Ito, 1984

Type-species: *Fusciludia aliquantula* Ito, 1984
Type-locality: Japan.

28. ***Fusciludia aliquantula*** Ito, 1984

Fusciludia aliquantula Ito, 1984c, Jap. Bohrfl. 4: 183.

Type-locality: Japan.

Description: Head yellowish brown; frons convex distally in profile, with profrons well developed and slightly narrower than 3rd antennal segment; or-bristles 2: 3, ori directing forwards; 2 oc-bristles short; lunula concave transversely vertical; face light brown, as long as its

lower margins, antenna shorter than face, 3rd segment nearly twice as long as wide, arista shortly pubescent; gena wider than 3rd antennal segment, with a black ge-bristle; occiput with upper half dark brown.

Thorax yellowish brown; mesonotum dark brown to black throughout; pleura with a pale yellowish marking; scutellum pale yellowish, with 4 sc-bristles; mesophragma dark brown to black.

Wing hyaline, with prominent dark brown and yellowish brown patterns; distal dark brown band present at anterior half of apical margin and continuous to distal transverse band which running from costal to posterior margins; basal markings darker anteriorly, lighter posteriorly.

Abdomen yellowish brown, mottled with ochreous pattern dorsally; basal segment of ovipositor dark brown, slightly shorter than the preceding tergite.

Length: Body 3.8-4.5 mm, wing 4-4.2 mm.

Locality: GW : Mt. Odaesan.
JJ : Mt. Hallasan.

Distribution: Korea (new record), Japan (Hokkaido, Honshu).

Host: Unknown.

Genus 25. ***Pseudacidia*** Shiraki, 1933

Type-species: *Acidia (Pseudacidia) issikii* Shiraki, 1933
Type-locality: Korea.

29. *Pseudacidia issikii* Shiraki, 1933

Acidia (Pseudacidia) issikii Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 219-220, pl. 6(1)①.
Pseudacidia issikii: Hardy, 1977, Cat. Dipt. Or. Reg. 3: 113.
Pseudacidia issikii: Ito, 1984d, Jap. Bohrfl. 5: 200-201.

Type-locality: Korea.

Description: Head yellowish brown; frons apparently wider than eye, furnished with black fine hairs; or-bristles 2: 3, strong, ori directing forwards; 2 oc-bristles well developed, nearly of same length with upper ors, or longer; lunula tomentose; face relatively long, whitish tomentose; antenna lightly shorter than face, with 3rd segment about 1.5 times as long as wide, arista shortly pubescent; gena slightly narrower than 3rd antennal segment, with a black ge-bristle.

Thorax shining yellowish brown; mesonotum without any prominent dark markings; scutellum strongly convex, with 4 sc-bristles; mesophragma shining black, without light markings.

Wing hyaline, with dark brown markings; basal half yellowish, r1 with 2 hyaline bands extending to r3; r5 with a large hyaline streak mesally and a smaller one basally, the former broadly extending to 2 m 2; 1 m 2 also with a hyaline transverse band extending to Cu; R_{4+5} bristled on dorsal side.

Abdomen shining ochreous; basal segment of ovipositor shining dark brown, distinctly shorter than its basal width.

Length: Body 5.5-6.5 mm, wing 6-7 mm.

Locality: GG : Kwangnŭng (=Koryo①).

Distribution: Korea.

Host: Unknown.

Subfamily Aciurinae

Genus 26. *Sphaeniscus* Becker, 1908

Type-species: *Sphaeniscus brevicauda* Becker, 1908
Type-locality: Canary Iss.

30. *Sphaeniscus atilius* (Walker, 1849)

Trypeta atilia Walker, 1849, List Dipt. Brit. Mus. 4; 1021.
Trypeta sexincisa Thomson, 1858, Dipt. Eug. Res.: 579.
Trypeta melaleuca Walker, 1862, Proc. Linn. Soc. Lond. 7; 238.
Trypeta formosana Enderlein, 1911, Zool. Jahrb., Abt. Syst. 31: 427, 428.
Spheniscus sexmaculatus (nec Macquart): Hendel, 1913, Ent. Mitt. 2: 28.
Spheniscomyia sexmaculata (nec Macquart): Bezzi, 1913, Mem. Ind. Mus. 3(3): 148-149, pl. 10(53).
Spheniscomyia sexmaculata (nec Macquart): Hendel, 1927, Flieg. pal. Reg. 49: 107.
Spheniscomyia sexmaculatus (nec Macquart): Shiraki, 1932, Icon. Ins. Jap.: 39, f. 70.
Spheniscomyia sexmaculatus (nec Macquart): Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 354-355①.
Spheniscomyia sexmaculata (nec Macquart): Zia, 1937, Sinensia 8(2): 182-183, pl. 4(33) (Korea).
Spheniscomyia sexmaculata (nec Macquart): Zia, 1938, Ibid. 9(1-2): 53 (Korea).
Spheniscomyia sexmaculata (nec Macquart): Zia, 1939, Ibid. 10(1-6): 5-6 (Korea).
Spheniscomyia sexmaculata (nec Macquart): Malloch, 1939, Proc. Linn. Soc. N. S. Wal. 64(3-4): 450.
Spheniscomyia sexmaculata (nec Macquart): Wu, 1940, Cat. Ins. Sin. 5: 443.
Spheniscomyia sexmaculata (nec Macquart): Kariya et Hirose, 1943, Trans. Biol. Soc. Manch. 6: 55-64.
Spheniscomyia atilia: Ito, 1945, Mushi 16: 85.
Spheniscomyia atilia: Chen, 1948, Sinensia 18 (1-6): 74 (Korea).
Spheniscomyia sexmaculatus (nec Macquart): Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1657, f. 4767 (Korea).
Spheniscomyia atilia: Ito, 1952, Trans. Shik. Ent. Soc. 3 (1): 9.
Sphaeniscus sexmaculatus atilia: Hardy, 1955, Pac. Sci. 9 (1): 78.
Sphaeniscus sexmaculatus atilia: Hardy et Adachi, 1956, Ins. Micr. 14 (1): 20-21.
Sphaeniscus sexmaculatus atilia: Hardy, 1959, Bull. Brit. Mus. (Nat. Hist.) Ent. 8(5): 237.
Sphaeniscus atilia: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 223, pl. 112 (10).
Spgeniscomyia sexmaculata (sic et nec Macquart): Zool. Soc. Kor., 1968, Nom An. Kor. 2: 181 (Korea).

Spheniscomyia sexmaculatus (nec Macquart): Kim, 1971, Ill. Encycl. Faun. & Flor. Kor. 12: 899-900 (Korea).
Sphaeniscus atilia: Kim et Kim, 1972, Rep. Kor. Ass. Cons. Nat. 6: 93②.
Sphaeniscus atilius: Hardy, 1973, Pac. Ins. Mon. 31: 120-122, pl. 4(32).
Sphaeniscus atilius: Hardy, 1974, Ibid. 32: 97-98.
Sphaeniscus atilius: Hardy, 1977, Cat. Dipt. Or. Reg. 3: 73 (Korea).
Sphaeniscus atilia: Ito, 1977, Col. Ill. Ins. Jap. 2: 263, pl. 51 (902).
Sphaeniscus atilius: Ito, 1984d, Jap. Bohrfl. 5: 208-210 (Korea).

Type-locality: China.

Description: Head ochreous brown; face wider than eye, narrowed anteriorly; or-bristles 2: 2, ori directing forwards; 2 oc-bristles slightly longer than upper ors; lunula small, deeply concave; face rather narrow, dark brown; antenna shorter than face; 3rd segment dark brown, twice as long as broad, with arista very shortly plumose; gena weakly developed, half as wide as 3rd antennal segment, with a black ge-bristle; occiput black.

Thorax black throughout; mesonotum covered with golden fine hairs; ppl-bristles pale yellowish; scutellum convex, shining black, with 4 sc-bristles; mesophragma shining black; legs with tibia and tarsi dark brown to brownish.

Wings hyaline, with 5 prominent dark brown transverse bands which continuously fused anteriorly; base hyaline; r1 with a hyaline band extending to r3.

Abdomen black throughout; basal segment of ovipositor shining black, about as long as 3 preceding tergites put together.

Length: Body 3.5-4.2 mm, wing 3.8-4.6 mm.

Locality: GG : Kwangnŭng (=Koryo①).
GW : Mt. Sŏlaksan.
JB : Kuch'ŏndong, Muju Kun (=Gucheondong, Muju-Gun②).
JJ : Chungmun.
JN : Is. Chindo, Is. Chŏpto, Is. Ch'ujado, Is. Hongdo, Is. Taehŭksando, Is. Wando.

Distribution: Korea, Japan (Honshu, Shikoku, Kyushu, Ryukyus), China (Manchuria, Taiwan), Burma, Indochina, Thailand, India.

Host: Infesting fruits of perillas.

Subfamily **Terelliinae**

Genus 27. ***Chaetostomella*** Hendel, 1927

Type-species: *Trypeta onotrophes* Loew, 1846
Type-locality: Sicily.

31. ***Chaetostomella stigmataspis* (Wiedemann, 1830)**

Trypeta stigmataspis Wiedemann, 1830, Auss. Zweifl. Ins. 2: 478-479.
Chaetostomella stigmataspis: Hendel, 1927, Flieg. pal. Reg. 49: 125-126.
Epochra sp.: Takahashi, 1928, Sos. Gait. Kak.: 111-113.

Chaetostomella stigmataspis: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 223, pl. 112(11).
Chaetostomella stigmataspis: Richter, 1970, Keys Ins. Eur. U.S.S.R. 5: 152.
Chaetostomella stigmataspis: Kim et al., 1975, Rep. Kor. Ass. Cons. Nat. 7: 247[①-②].
Chaetostomella stigmataspis: Ito, 1984d, Jap. Bohrfl. 5: 214-215.

Type-locality: U.S.S.R. (S. Russia).

Description: Head yellowish brown; frons as wide as eye, rather protrudent anteriorly; profrons well developed, but narrower than 3rd antennal segment; or-bristles 2: 3, ori directing forwards, upper ors directing inwards; 2 oc-bristles strikingly well developed, apparently longer than any of or-bristles; lunula pale yellowish brown, narrow; face pale yellowish brown; antenna shorter than face, 3rd segment twice as long as wide, with arista very shortly pubescent; gena 1/6 times as high as eye, with 2 ge-bristles among them often the posterior one is yellowish brown; peristoma with 5-6 black strong bristles.

Thorax yellowish brown; mesonotum with 3 longitudinal bands, among them the median one broadest, each black spot present behind of prst, basal parts of dc and prsc one another, the latter largest; scutellum with 3 black spots peripherally and apically, with 4 sc-bristles; mesophragma brown, with a median dark brown streak.

Wing hyaline, with 3 yellowish brown transverse bands, which tinted with dark brown marginally; base broadly yellowish brown except posterior marginal area.

Abdomen yellowish brown, with 4 rows of black spots on dorsum, covered with black hairs; basal segment of ovipositor brown, about as long as 2 preceding tergite put together.

Length: Body 7-9 mm, wing 7-7.2 mm.

Locality: GW : Ch'ŏlwon[②], Mt. Kodaesan[①], Mt. Sŏlaksan.

Distribution: Korea, Japan (Honshu), China (Manchuria), U.S.S.R., Europe.

Host: Infesting wild burdock and *Synurus* sp.

Subfamily Tephritinae

Key to genera of Tephritinae

1. Upper ors-bristle directing inwards ..... *Xyphosia*
   —. Upper ors-bristle when present directing backwards 2
2. Having 1 ori-bristle; parafacialia and gena markedly broad, the latter nearly 2.5 times as wide as the width of 3rd antennal segment ..... *Oxyna*
   —. Having 2-4 ori-bristles; parafacialia and gena narrow to moderate, the latter far less than twice as wide as the width of 3rd antennal segment 3
3. Having 1 ors-bristle ..... *Ensina*
   —. Having 2 ors-bristles 4
4. Both 2 ors-bristles equally dark to blackish 5
   —. Upper ors-bristle always pale 6
5. Having 2 ori-bristles ..... *Aliniana*
   —. Having 4 ori-bristles ..... *Chejuparia* gen. nov

6. With ori-bristles entirely yellowish ..... *Ictericodes*
   —. With ori-bristles always dark brown to black 7
7. Vein R_{4+5} bristled on both sides, at least at its basal portion ..... *Acinia*
   —. Vein R_{4+5} bare on dorsal side 8
8. Vein R_{4+5} bristled on ventral side 9
   —. Vein R_{4+5} bare on ventral side 10
9. Having 2 ori-bristles and 4 sc-bristles; pt-bristle dark ..... *Tephritis*
   —. Having 3 ori-bristles and 2 sc-bristles; pt-bristle pale ..... *Trupanea*
10. Antennal bases far apart from each other; frons about twice as wide as eye; pterostigma with 2 hyaline spots ..... *Campiglossa*
    —. Antennal bases moderately close to each other; frons at most twice as wide as eye; pterostigma with a hyaline spot, or entirely absent 11
11. Having 2 sc-bristles ..... *Dioxyna*
    —. Having 4 sc-bristles ..... *Paroxyna*

Genus 28. ***Xyphosia*** Robineau-Desvoidy, 1830

Type-species: *Xyphosia cirsiorum* Robineau-Desvoidy, 1830
Type-locality: Europe.

32. *Xyphosia punctigera* (Coquillett, 1898)

Tephritis punctigera Coquillett, 1898, Proc. U.S. Nat. Mus. 21: 338.
Xyphosia punctigera: Hendel, 1927, Flieg. pal. Reg. 49: 140, pl. 8 (11).
Xyphosia punctigera: Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 469-471.
Xyphosia sunctigera (sic): Shinji, 1944, (Galls & Gall-Ins.): 309-310.
Xyphosia punctigera: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1654, f. 4759.
Xyphosia punctigera: Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 9.
Xyphosia punctigera: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 223, pl. 112 (13).
Xyphosia punctigera: Aoki, 1966, Comm. Ins. Jap. Col.: 12, pl. 5(33).
Xyphosia punctigera: Ito, 1977, Col. Ill. Ins. Jap. 2: 262-263, pl. 51(899).
Xyphosia punctigera: Kim et Nam, 1978, Rep. Kor. Ass. Cons. Nat. 13: 139①.
Xyphosia punctigera: Ed. Dep. Hok., 1979, (Ill. Ins. Jap. Stud. ed.): 297, f. 1669.
Xyphosia punctigera: Ito, 1984d, Jap. Bohrfl. 5: 220-221.

Type-locality: Japan.

Description: Head yellowish brown, furnished with yellowish hairs; frons as wide as eye, narrowed anteriorly, base 1.5 times as wide as apex; or-bristles 2: 3, upper ors directing inwards, whitish; 2 oc-bristles moderate and whitish; lunula pale yellowish, rather large; face pale yellowish brown, with a median streak yellowish brown; antenna apparently shorter than face, 3rd segment twice as long as wide, with arista shortly pubescent; gena as wide as 3rd antennal segment, with a ge-bristle black.

Thorax yellowish brown; mesonotum deeper in tint, without any prominent dark markings; scutellum concolorous, with 4 sc-bristles, apical pair slightly shorter than basal one; mesophragma dark brown.

Wing light to deep brownish, scattered with numerous hyaline spots, the brown pattern as a whole somewhat Y-shaped collectively; r1 with 3 hyaline larger spots; r3 with 4 medium-sized hyaline spots; r-m rather oblique; R_{4+5} bristled on dorsal side.

Abdomen yellowish brown; basal segment of ovipositor ochreous, with a dark brown streak at base laterally, covered with black hairs, rather conical, longer than 4 preceding tergites put together, base 3 times as wide as apex.

Length: Body 5-8.5 mm, wing 5-6 mm.

Locality: GW : Imgye Myŏn (=Imgye-myeon ①).

Distribution: Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu).

Host: Infesting *Cirsium* spp.

Genus 29. *Aliniana* Hering, 1951

Type-species: *Aliniana aliena* Hering, 1951
Type-locality: China (Manchuria).

33. *Aliniana longipennis* (Shiraki, 1933)

Campiglossa longipennis Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 417-419, pl. 12(3).
Gonioxana paradigma Hering, 1941, Ann. Mus. Nat. Hung. Zool. 34: 71-72.
Campiglossa longipennis: Shiraki, 1950, Icon. Ins. Jap. ed. sec. ref.: 1655, f. 4762.
Aliniana longipennis: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 224, pl. 112(15).
Aliniana longipennis: Kim et Kim, 1971, Rep. Kor. Ass. Cons. Nat. 4: 169 ①.
Aliniana longipennis: Kim et al., 1975, Ibid. 7: 247 ②.
Aliniana longipennis: Kim, Kim et Ryu, 1976, Ibid. 9: 111 ③.
Aliniana longipennis: Ito, 1984d, Jap. Bohrfl. 5: 222-224.

Type-locality: Japan.

Description: Head yellowish brown; frons 1.5 times as wide as eye, rather bare, strongly convex in profile; or-bristles 2: 2, upper ors black, directing backwards; 2 oc-bristles strong, much longer than ors; lunula rather large; face pale yellowish brown, relatively small; antenna shorter than face, 3rd segment twice as long as wide, with arista very shortly pubescent; gena 0.2 times as high as eye, with a pale ge-bristle.

Thorax dark brown to black; mesonotum black, covered with whitish fine hairs; scutellum dark greyish, with 4 sc-bristles; mesophragma black; legs with tibia and tarsi brownish.

Wing dark brown, scattered with numerous hyaline spots; pterostigma with a hyaline spot in male, an additional smaller hyaline spot present basally; r1 with 3 hyaline spots in male, 4 in female; r3 with 5-6 hyaline spots of irregular size; r5 with a hyaline spot at apex, and 5-7 spots of irregular size throughout.

Abdomen dark brown to black, with obscure dark greyish patches on dorsum; basal segment of ovipositor shining black, as long as its basal width, longer than 2 preceding tergites put together.

Length: Body 4-6.5 mm, wing 4-6 mm.

Locality: GW : Pass Kwangch'iryŏng ②, Mt. Odaesan ①, Sinnim Myŏn ③.

Distribution: Korea, Japan (Hokkaido, Honshu), U.S.S.R. (Kuriles, Sachalin).

Host: Feeding on *Anaphalis* sp.

Genus 30. ***Chejuparia*** gen. nov. (gender: feminine)

Type-species: *Chejuparia pibari* gen. et sp. nov.
Type-locality: Korea.

Diagnosis: Head in profile distinctly higher than long, about 1.7 times as wide as long in dorsal aspect; frons broad rectangular, feebly protrudent anteriorly; or-bristles 2: 4, always black; face with median keel very weak; antenna with arista bare; parafacialia broadly de-developed; gena rather broad, with a ge-bristle.

Thorax with ppl-bristle pale; scutellum strongly convex in female, with 4 sc-bristles of subequal length.

Wing with R_{4+5} bristled basally on dorsal side, ventral side bare; pterostigma half as long as c1, with 2 dissimilar yellowish spots; R_{2+3} more or less straight, bare on both sides; R_{4+5} and M rather parallel each other, slightly divergent at either apex.

Abdomen as wide as thorax; basal segment of ovipositor rather conical.

Remark: This peculiar monotypic genus can be easily separated by having 4 ori bristles from other related genera.

34. *Chejuparia pibari* gen. et sp. nov.

Description: Head yellowish brown; frons nearly 1.7 times as wide as eye, with either sides somewhat extending anteriorly; or-bristles 2: 4, always black; 2 oc-bristles well developed, longer than ors; lunula relatively large; face pale yellowish brown; antenna short, reaching to 2/3 of face, about 1.4 times as long as wide, with dorsal side concave, arista bare; gena as wide as 3rd antennal segment, with a black ge-bristle.

Thorax mostly black, with brown markings on humeral callus and wing base; prosternum yellowish brown; mesonotum black, yellow greyish pollinose, covered with golden short hairs; scutellum dark brown distally, with 4 sc-bristles of subequal length having black spot on each base; mesophragma black; legs yellowish brown to brown.

Wing dark brown, scattered with hyaline spots; base yellowish; pterostigma with 2 yellowish dissimilar spots; r1 with 2 hyaline spots at proximal half; r3 with 2-3 hyaline proximal and an apical spots; r5 with 3 hyaline spots in male, the median one absent in female.

Abdomen with dorsum mostly dark brown in female, ochreous with dark markings in male; basal segment of ovipositor shining black with ochreous marking dorsally, shorter than 2 preceding tergites put together.

Length: Body 4.8-5.2 mm, wing 4.8-5.2 mm.

Type-examined: Holotype male, Mt. Hallasan, JJ, S. Korea, 9, VII, 1984, coll. Y.J. Kwon; paratypes: 14 males, 6 females, same data as holotype.

Host: Unknown.

Remark: The present new species is apparently separated from other related groups by the unique wing pattern.

Genus 31. *Ictericodes* Hering, 1942

Type-species: *Trypeta japonica* Wiedemann, 1830
Type-locality: M. Europe (no Japan !).

35. *Ictericodes changhyoi* sp. nov.

Description: Head bright yellowish brown, with all the bristles yellowish to yellowish brown; frons 1.8 times as wide as eye, rather parallel-sided; or-bristles 3: 2, entirely yellowish, ori directing forwards; 2 oc-bristles yellowish, longer than upper ors; lunula short; face deep; antenna slightly shorter than face; 3rd segment 1.9 times as long as wide, with dorsal side concave; arista shortly plumose; gena narrower than 3rd antennal segment, with ge-bristle reduced; occiput yellowish brown.

Thorax yellowish brown throughout, bearing with all the bristles yellowish to yellowish brown; scutellum with 4 sc-bristles; mesophragma yellowish brown; legs yellowish brown.

Wing with dark brown pattern mottled with hyaline spots; veins yellowish basally; pterostigma dark brown, with 2 hyaline spots; r1 with 3 large hyaline spots, a small spot present between basal and median spots; r3 with a larger apical hyaline spot at apex of R_{2+3}, and a smaller one at posterior corner, in addition to 7 dissimilar spots; r5 with an apical hyaline spot, besides 5 spots of irregular size; apex of anal cell with a prominent dark brown spot; R_{4+5} bristled on dorsal side, and furnished with a few bristels on ventral base.

Abdomen with dorsum ochreous; basal segment of ovipositor with apex dark brown, 1.1 times as long as 2 preceding tetgites put together.

Length: Body 5 mm, wing 4.8 mm.

Type-examined: Holotype male, Mt. Sŏlaksan, GW, C. Korea, 27, VII, 1982, coll. Y.J. Kwon.

Host: Unknown.

Remark: The present new species can be easily distinguished from the other known species of the genus by the wing pattern.

Genus 32. *Acinia* Robineau-Desvoidy, 1830

Type-species: *Trypeta corniculata* Zetterstedt, 1819
Type-locality: Europe.

36. *Acinia jungsukae* sp. nov.

Description: Head yellowish brown; frons nearly twice as wide as eye, slightly narrowed anteriorly; or-bristles 2: 2, upper ori pale yellowish, remainder black; 2 oc-bristles well developed, longer than ors; lunula moderate; face pale yellowish brown, rather narrow; antenna shorter than face, 3rd segment 1.8 times as long as wide, with arista very shortly pubescent; gena na-

rrow, nearly half as wide as 3rd antennal segment, with a black prominent ge-bristle.

Thorax yellowish brown, partially with dark brown markings, yellow greyish pollinose; mesonotum mostly dark brown, covered with pale short hairs; scutellum mostly yellowish brown, with 4 sc-bristles, apical pair shorter than basal one; mesophragma black, yellow greyish pollinose.

Wing with dark brown pattern mottled with numerous hyaline spots; pterostigma with a hyaline spot; r1 with 3 large hyaline spots; r3 with 2-3 apical hyaline spots, besides other several spots of irregular size; r5 with a small apical spot in addition to other several spots of irregular size; R_{4+5} bristled from base to beyond half on ventral side, and furnishing a few on dorsal side.

Abdomen yellowish brown, covered with golden short hairs, with 2 raws of dark markings dorsally; basal segment of ovipositor shining black, with apex dark brown, nearly as long as 2 preceding tergites put together.

Length: Body 5.2 mm, wing 4.8 mm.

Type-examined: Holotype female, Mt. Kajisan, GN, S. Korea, 7, VI, 1981, coll. Y.J. Kwon.

Host: Unknown.

Remark: The present new species differs from other known groups by the wing pattern.

Genus 33. ***Oxyna*** Robineau-Desvoidy, 1830

Type-species; *Oxyna flavescens* Robineau-Desvoidy, 1830
Type-locality: Europe.

37. *Oxyna parietina* (Linnaeus, 1758)

Musca parietina Linnaeus, 1758, Syst. Nat. ed. 10(1): 599.
Tephritis pantherina Fallen, 1820, Dipt. Suec. Ort.: 10.
Oxyna parietina: Loew, 1862, Eur. Bohrfl.: 85-86, pl. 15(4).
Oxyna parietina: Hendel, 1927, Flieg. pal. Reg. 49: 168-169, pl. 11(12).
Tephritis fulvimaculata Shinji, 1939, Ins. World 43: 325-326, pl. 1(4):
Xyphosia punctigera (nec Coquillet): Ito, 1947, Matsumushi 2 (2): 59.
Oxyna parietina: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 224, pl. 112 (16).
Oxyna parietina: Richter, 1970, Keys Ins. Eur. U.S.S.R. 5: 162.
Oxyna parietina: Kim et Nam, 1978, Rep. Kor. Ass. Cons. Nat. 13: 139 ①.
Oxyna parietina: Ito, 1984d, Jap. Bohrfl. 5: 237-238.

Type-locality: Europe.

Description: Head yellowish brown; frons conspicuously wide, 3.5 times as wide as eye; or-bristles 2: 1, upper ors pale; 2 oc-bristles strong, much longer than ors; lunula large and convex; face light brown; antenna shorter than face, 3rd segment 1.3 times as long as wide, with arista bare throughout; gena strikingly wide, nearly half as high as eye, with a pale ge-bristle and many shorter pale bristles.

Thorax dark brown to black; mesonotum black, covered with yellowish brown hairs; scutellum markedly convex, with 4 sc-bristles; mesophragma black, with greyish fine hairs; legs with tibia and tarsi yellowish brown.

Wing brown to dark brown partially, scattered with numerous hyaline spots; pterostigma with 2-3 hyaline spots, often fused together; r1 with 3 hyaline larger spots and 9-11 smaller of irregular size ones in male; a large hyaline spot present in addition to numerous small of irregular size on each c3 and c5.

Abdomen dark brown to black, covered with pale hairs; basal segment of ovipositor shining black, shorter than 2 preceding tergites put together.

Length: Body 4-6 mm, wing 5-6 mm.

Locality: GW : Imgye Myon(= Imgye-myon ①).

Distribution: Korea, Japan (Hokkaido, Honshu), China, Europe.

Host: Feeding on *Artemisia* spp.

Genus 34. ***Ensina*** Robineau-Desvoidy, 1830

Type-species: *Ensina scorzonerae* Robineau-Desvoidy, 1830
Type-locality: Europe.

38. ***Ensina sonchi*** (Linnaeus, 1767)

Musca sonchi Linnaeus, 1767, Syst. Nat. ed. 12, 1(2): 998.
Tephritis sonchi: Fallen, 1814, Act. Holm.: 23.
Ensina chrysanthemi + *E. herbarum* + *E. pratensis* + *E. linariae* + *E. scorzonerae* + *E. doronici* Robineau-Desvoidy, 1830, Mem. pres. div. Sav. Acad. Sci. Inst. Franc. 2: 752-753.
Ensina lacteipennis Hendel, 1915, Ann. Mus. Nat. Hung. 13: 464-465.
Ensina sonchi: Hendel, 1927, Flieg. pal. Reg. 49: 171-172.
Ensina lacteipennis: Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 465-467.
Ensina sonchi: Ito, 1951, Sci. Rep. Fac. Agr. Naniwa Univ. 1: 6.
Ensina sonchi: Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 13.
Ensina sonchi: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 223-224, pl. 112 (14).
Ensina sonchi: Shiraki, 1968, U. S. Nat. Mus. Bull. 263: 82-85, pl. 31.
Ensina sonchi: Richter, 1970, Keys Ins. Eur. U.S.S.R. 5: 162-163.
Ensina sonchi: Hardy, 1974, Fac. Ins. Mon. 32: 239-240.
Ensina sonchi: Richter, 1975, Ins. Mong. 3: 596.
Ensina sonchi: Hardy, 1977, Cat. Dipt. Or. Reg. 3: 125.
Ensina sonchi: Ito, 1977, Col. Ill. Ins. Jap. 2: 263, pl. 51(901).
Ensina sonchi: Ed. Dep. Hokuryukan, 1979, (Ill. Ins. Jap. Stud. ed.): 297, f. 1668.
Ensina sonchi: Ito, 1984e, Jap. Bohrfl. 6: 242-243.

Type-locality: Europe.

Description: Head light yellowish brown, about as high as wide or slightly lower in profile; frons twice as wide as eye, narrower anteriorly, bare mesally; or-bristles 1: 3, ors black; 2 oc-bristles strong, much longer than ors; lunula relatively large; face small and short, pale yellowish brown; antenna apparently exceeding face, 3rd segment slightly longer than wide, with arista bare; gena conspicuously narrow, less than half as wide as 3rd antennal segment, with a yellowish ge-bristle; occiput with a large black marking on upper area.

Thorax light yellowish brown; mesonotum mostly black; scutellum yellowish brown, flat, with 4 sc-bristles; mesophragma black; mesosternum black; legs yellowish brown.

Wing milky hyaline; pterostigma with a dark brown spot; r1 with 2 obscure dark cloudy streaks; r-m and m-cu with obscure dark bands.

Abdomen yellowish brown, with dark brown to black markings; basal segment of ovipositor as long as 3 preceding tergites put together.

Length: Body 2.8-3.5 mm, wing 3.2-3.5 mm.

Locality: CN : Mt. Tŏksungsan.
GB : Hayang Ŭp, Mt. P'algongsan, Taegu, Is. Ullŭngdo.
GN : Samnam Myŏn, Is. Yokchido.
JJ : Chungmun.

Distribution: Korea (new record), Japan (Hokkaido, Honshu, Shikoku, Ryukyus), China (Manchuria), Mongolia, Philippines, Europe, Hawaii.

Host: *Bidens* spp., *Cirsium* spp., *Erigeron* spp., *Picris* sp., *Senecio* spp., *Sonchus* spp., and *Taraxacum* spp. etc. The larvae are seed feeders on a wide variety of Compositae and other wild herbs.

Genus 35. ***Tephritis*** Latreille, 1804

Type-species: *Musca arnicae* Linnaeus, 1758
Type-locality: Europe.

Key to species of *Tephritis*

1. Pterostigma of wing mostly hyaline except apex; fuscous pattern not developed at basal half ..... ***Tephritis carcassa***
—. Pterostigma of wing entirely dark brown; fuscous pattern well developed at basal half ..... ***Tephritis koreacola*** sp. nov.

39. *Tephritis carcassa* Dirlbek et Dirlbekova, 1974

Tephritis carcassa Dirlbek et Dirlbekova, 1974, Ann. Zool. & Bot. 92: 4 ①-②.

Type-locality: Korea.

Description: Head yellowish; frons yellowish; or-bristles 2: 2, ori directing forwards, upper ors pale; 2 oc-bristles strong, well developed, much longer than ors; face yellowish; antenna yellowish, shorter than face, 3rd segment short, roundly terminated; gena with a pale ge-bristle; occiput with a black patch.

Thorax dark brown to black, densely covered with silver greyish fine hairs; mesothorax with a yellowish lateral band; scutellum dark brown to black, silver greyish pollinose, with 4 sc-bristles, among them the basal pair longer than the apical pair.

Wing hyaline, with prominent dark brown markings distally which bearing with hyaline spots; apex of pterostigma dark brown; r1 dark brown distally, with a large hyaline spot on it, and an obscure dark streak present beneath pterostigma; dark pattern of r3 with 2 hyaline spots;

r5 with 3 hyaline spots apically, and one near to r-m.

Abdomen black, covered with silver greyish fine hairs; basal segment of ovipositor shining black, nearly as long as 3 preceding tergites put together.

Length: Body 2-3 mm, wing 2-3 mm.

Locality: GW : Mt. Kŭmgangsan (=Kymgansang ②).
PN : P'yŏngyang (=Pchenjang ①).

Distribution: Korea.

Host: Unknown.

40. *Tephritis koreacola* sp. nov.

Description: Head yellowish brown; frons about twice as wide as eye, slightly narrowed anteriorly, more or less flat; or-bristles 2: 2, upper ors whitish; 2 oc-bristles strong, much longer than ors; lunula strikingly broad; face without median keel; antenna apparently shorter than face, 3rd segment broad, slightly longer than wide (5: 4), with dorsal side concave, broadly terminated, arista very shortly pubescent; gena narrow, with a yellowish ge-bristle and several additional short yellow bristle.

Thorax mostly dark brown, with yellowish brown streak from humeral callus to wing base; mesonotum black; scutellum with 4 sc-bristles, the apical pair much shorter than the basal one; mesophragma black, silver greyish pollinose.

Wing hyaline, with dark brown patterns mottled with numerous hyaline spots; base hyaline; pterostigma entirely dark brown; r1 with 2 hyaline spots extending to r3, and with a small hyaline spot apically; r3 with a smaller and a larger spots apically; r5 with 3 spots apically and a prominent one basally; anal area completely mottled with fuscous markings.

Abdomen mostly black, covered with pale hairs; basal segment of ovipositor mostly shining dark brown, apparently shorter than 2 preceding tergites put together.

Length: Body 4-5 mm, wing 4-4.5 mm.

Type-examined: Holotype male, Mt. Sŏlaksan, GW, C. Korea, 28, VII, 1982, on *Cirsium* sp., coll. Y.J. Kwon; paratypes: 7 males, 4 females, same data as holotype.

Host: *Cirsium* sp.

Remark: The present new species closely resembles *Tephritis majuscula* Hering et Ito, 1953, from Japan, but can be separated from the latter by the fuscous markings on anal area of the wing. Previously known records of the latter form Central Korea may be referred to this species.

Genus 36. *Trupanea* Schrank, 1795

Type-species: *Trupanea radiata* Schrank, 1795
Type-locality: Europe.

Key to species of *Trupanea*

1. Apex of wing collectively hyaline; oblique dark band from pterostigma to distal r rather prominent, hardly interrupted . . . . . *Trupanea amoena*

–. Apex of wing with 3 hyaline spots; oblique dark band from pterostigma to apex of r rather obscure, apparently interrupted ..... *Trupanea gratiosa*

41. *Trupanea amoena* (Frauenfeld, 1856)

Trypeta amoena Frauenfeld, 1856, Sitzb. Akad. Wiss. Wien. 22: 542.
Trypanea amoena (sic): Bezzi, 1913, Mem. Ind. Mus. 3(3): 167, pl. 10(70).
Trypanea amoena (sic): Hendel, 1927, Flieg. pal. Reg. 49: 198-199, pl. 16(1).
Trypanea amoena (sic): Seguy, 1934, Faun. Franc. 28: 166-167, pl. 16 (184).
Trypanea amoena (sic): Zia, 1937, Sinensia 8 (2): 217-218.
Trypanea amoena (sic): Chen, 1938, Ibid. 9 (1-2): 164, pl. 8 (47).
Trypanea amoena (sic): Hering, 1938, Mitt. Deutsch. Ent. Ges. 9 (1): 10-11.
Trypanea amoena (sic): Shinji, 1940, Ins. World 44: 130-131.
Trypanea amoena (sic): Shiraki, 1950, Icon. Ins. Jap. ed. secc. ref.: 1654, f. 4758.
Trypanea amoena (sic): Minamikawa et Ishikawa, 1950, Agr. Hort. 25 (10): 899.
Trupanea amoena: Frey, 1958, Soc. Sci. Fenn. Comm. Biol. 17(4): 38.
Trupanea amoena: Munro, 1964, Rep. S. Afr. Dep. Agr. Tech. Serv. Ent. Mem. 8: 55-57.
Trupanea amoena: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 224.
Trupanea amoena: Richter, 1970, Keys Ins. Eur. U.S.S.R. 5: 171.
Trupanea amoena: Hardy, 1974, Pac. Ins. Mon. 32: 252-254.
Trupanea amoena: Richter, 1975, Ins. Mong. 3: 800.
Trupanea amoena: Hardy, 1977, Cat. Dipt. Or. Reg. 3: 131.
Trupanea amoena: Cogan et Munro, 1980, Cat. Dipt. Afr. Reg.: 550.
Trupanea amoena: Ito, 1984e, Jap. Bohrfl. 6: 253-254.

Type-locality: Europe.

Description: Head yellowish brown; frons 1.5 times as wide as eye; or-bristles 2: 3, upper ors pale; 2 oc-bristles short, about as long as or slightly exceeding upper ors; lunula pale yellowish; face without median keel; antenna nearly as long as face, 3rd segment broad, 1.3 times as long as wide, deeply concave on dorsal side, with arista very shortly pubescent; gena slightly narrower than 3rd antennal segment, ge-bristle not developed.

Thorax mostly dark brown to black, covered with pale hairs, with yellowish brown streak from humeral callus to wing base; mesonotum black; scutellum only with 2 sc-bristles basally; mesophragma black, silver greyish pollinose.

Wing hyaline at proximal 2/3, with dark brown markings distally, apex hyaline; an oblique narrow dark band present from pterostigma to distal part of r; r1 with a large hyaline spot at the base of dark brown pattern; r3 with a hyaline spot subapically; r5 with 2 close hyaline spots basally.

Abdomen mostly dark brown to black, covered with pale fine hairs; basal segment of ovipositor shining black, flat, slightly shorter than 3 preceding tergites put together.

Length: Body 3.5-4 mm, wing 4 mm.

Locality: JN : Is. Hongdo.

Distribution: Korea (new record), Japan (Honshu), China (Manchuria), Mongolia, Europe.

Host: Infesting in flower heads of various Compositae.

42. *Trupanea gratiosa* (Ito, 1952)

Trypanea gratiosa (sic) Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 10-11.
Trupanea gratiosa: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 224, pl. 112(18).
Trupanea gratiosa: Kim, Kim et Ryu, 1976, Rep. Kor. Ass. Cons. Nat. 9: 111①.
Trupanea gratiosa: Ito, 1984e, Jap. Bohrfl. 6: 254-255.

Type-locality: Japan.

Description: Head yellowish brown; frons wider than eye, gradually narrowed anteriorly, rather flat; or-bristles 2: 3, upper ors pale; 2 oc-bristles short, but slightly longer than upper ors; lunula large, more or less semicircular; face light brownish, median keel not developed; antenna shorter than face, 3rd segment 1.5 times as long as wide; gena slightly narrower than 3rd antennal segment, ge-bristle reduced.

Thorax mostly dark brown to black, covered with pale hairs, with yellowish brown streak from humeral callus to wing base; scutellum only with 2 sc-bristles basally; mesophragma black, silver greyish pollinose; legs yellowish brown.

Wing hyaline on basal half, with dark brown pattern distally; an oblique interrupted fuscous streak present obscurely from pterostigma to the anterior tip of r-m; r1 with a hyaline spot at the base of dark brown pattern; r3 with 2 costal spots; r5 with 2 hyaline spots apically and one basally.

Abdomen with dorsum dark brown to black; basal segment of ovipositor shining black, about as long as the preceding tergite.

Length: Body 4-5 mm, wing 3-4 mm.

Locality: GN : Is. Yokchido.
GW : Mt. Ch'iaksan①.

Distribution: Korea, Japan (Honshu, Shikoku, Kyushu).

Host: Unknown.

Genus 37. *Dioxyna* Frey, 1945

Type-species: *Trypeta sororcula* Wiedemann, 1830
Type-locality: Canary Iss.

43. *Dioxyna sororcula* (Wiedemann, 1830)

Trypeta sororcula Wiedemann, 1830, Auss. Zweifl. Ins. 2: 509.
Leptomyza variipannis Wulp, 1897, Term. Fuz. 20: 143.
Oxyna sororcula: Becker, 1905, Kat. Pal. Dipt. 4: 135.
Ensina bisetosa Enderlein, 1911, Zool. Jahrb., Abt. Syst. 31: 455-456.
Oxyna sororcula: Bezzi, 1913, Mem. Ind. Mus. 3(3): 159, pl. 10(61).
Ensina sororcula: Hendel, 1915, Ann. Mus. Nat. Hung. 14: 465.
Paroxyna sororcula: Hendel, 1927, Flieg. pal. Reg. 49: 158-159.
Paroxyna sororcula: Shiraki, 1932, Icon. Ins. Jap.: 44. f. 80.
Ensina sororcula: Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8(2): 462-465.
Paroxyna sororcula: Zia, 1939, Sinensia 10 (1-6): 10-11.

Dioxyna sororcula: Frey, 1945, Soc. Sci. Fenn. Comm. Biol. 8(10): 62.
Paroxyna sororcula: Hardy, 1954, Proc. Haw. Ent. Soc. 15: 332.
Stylia sororcula: Hering, 1954, Bonn. Zool. Beitr. 1-2: 172.
Paroxyna (Dioxyna) sororcula: Munro, 1955, Boll. Lab. Zool. Gen. Agr. 33: 424.
Stylia sororcula: Hardy et Adachi, 1956, Ins. Micr. 14(1): 21-22.
Dioxyna sororcula: Munro, 1957, Ruw. Exp. 1934-35, 2(9): 938-942.
Dioxyna sororcula: Frey, 1958, Soc. Sci. Fenn. Comm. Biol. 17(4): 36-37.
Stylia sororcula: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 224, pl. 112(20).
Stylia sororcula: Ito, 1965b, Spec. Bull. Lep. Soc. Jap. 1: 197-198.
Ensina sororcula: Shiraki, 1968, U. S. Nat. Mus. Bull. 263: 85-88, pl. 32.
Dioxyna sororcula: Hardy, 1973, Pac. Ins. Mon. 31: 319-321.
Dioxyna sororcula: Hardy, 1974, Ibid. 32: 237.
Dioxyna sororcula: Hardy, 1977, Cat. Dipt. Or. Reg. 3: 125.
Dioxyna sororcula: Cogan et Munro, 1980, Cat. Dipt. Afr. Reg.: 545.
Dioxyna sororcula: Ito, 1984e, Jap. Bohrfl. 6: 257-259.

Type-locality: Is. Canary.

Distribution: Head yellowish brown, longer than high in profile; frons 1.7 times as wide as eye, slightly narrowed and produced anteriorly; or-bristles 2: 2, ori directing forwards, upper ors pale; 2 oc-bristles longer than ors; lunula small; face narrow; antenna reaching to lower margin of face, 3rd segment 1.2 times as long as wide, with arista shortly pubescent; parafacialia broadly developed; epistoma produced well; gena markedly narrow, half as wide as 3rd antennal segment; occiput with a large dark marking.

Thorax black, yellow greyish pollinose, with prosternum yellowish brown; yellowish brown streak present from humeral callus; scutellum with 2 basal sc-bristles, apical pair entirely reduced; mesophragma mat; legs yellowish brown.

Wing with feebly dark brown pattern mottled with numerous hyaline spots; pterostigma dark brown except hyaline base; r1 with 3 large hyaline spots: r3 with a large hyaline spot apically, besides other spots of irregular size; dark pattern on posterior half markedly obscure.

Abdomen black dorsally, silver greyish pollinose with dark markings; basal segment of ovipositor shining black, slightly shorter than 3 preceding tergites put together.

Length: Body 2.5-3 mm, wing 2.6-3 mm.

Locality: JJ : Sŏguip'o.
JN : Is. Taehŭksando.

Distribution: Korea (new record), Japan (Honshu, Kyushu, Ryukyus), China (South, Taiwan), Indochina, Thailand, Philippines, India, Africa.

Host: The larvae are seed infesters living in the flower heads of various kinds of Compositae.

Genus 38. ***Paroxyna*** Hendel, 1927

Type-species: *Trypeta tessellata* Loew, 1844
Type-locality: Germany

Key to species of *Paroxyna*

1. Cell r3 of wing with 2-3 apical hyaline spots besides other spots of irregular size 2
   —. Cell r3 of wing with a large apical hyaline spot besides other spots of irregular size . 3
2. Apical hyaline spots of r3 distinctly separated from each other, having 2 spots in male, 3 in female . . . . . *Paroxyna messalina*
   —. Apical hyaline spots of r3 partially continuous with each other, having 2 spots in both sexes . . . . . *Paroxyna quelpartensis* sp. nov.
3. Pterostigma with a hyaline spot larger, nearly extending to half width of pterostigma; basal segment of ovipositor as long as 2 preceding tergites put together . . . . . *Paroxyna frolica*
   —. Pterostigma with a hyaline spot strikingly small, pit-like, apparently not reaching to half width of pterostigma; basal segment of ovipositor as long as 3 preceding tergites put together . . . . . *Paroxyna sada*

44. *Paroxyna messalina* Hering, 1937

Paroxyna messalina Hering, 1937a, Mitt. Deutsch. Ent. Ges. E.V. 8(4): 58-59.
Stylia messalina: Ito, 1965a, Icon. Ins. Jap. Col. nat. ed. 3: 224, pl. 112 (21).
Stylia messalina: Kim et Kim, 1972, Rep. Kor. Ass. Cons. Nat. 6: 93①.
Stylia messalina: Kim, Kim et Ryu, 1976, Ibid. 9: 111②.
Stylia messalina: Kim et Nam, 1978, Ibid. 13: 139③.
Paroxyna messalina: Ito, 1984e, Jap. Bohrfl. 6: 266-268.

Type-locality: China (Manchuria).

Description: Head yellowish brown; frons apparently wider than eye, but less than twice, rather flat; or-bristles 2: 2, ori directing forwards, upper ors pale; 2 oc-bristles strong, longer than ors; lunula narrow; face without median keel; antenna nearly reaching to lower margin of face, 3rd segment 1.5 times as long as wide, with arista very shortly pubescent; gena as wide as 3rd antennal segment, with a yellowish ge-bristle.

Thorax mostly dark brown to black, silver greyish pollinose, with yellowish brown streak from humeral callus to wing base; mesonotum black, covered with pale short hairs; scutellum with 4 sc-bristles, apical pair nearly half as long as basal pair; mesophragma black, silver greyish pollinose.

Wing dark brown, scattered with numerous hyaline spots; base hyaline; pterostigma entirely brown in male, with a hyaline spot in female; r1 with 3 hyaline spots, r3 with 2 apical hyaline spots in male, 3 spots in female; r5 with a hyaline apical spot in addition to 5-6 other spots.

Abdomen yellowish brown, with dark brown markings on dorsum; basal segment of ovipositor shining dark brown, slightly shorter than 2 preceding tergites put togehter.

Length: Body 3-4 mm, wing 3-3.8 mm.

Locality: GW : Mt. Ch'iaksan , Imgye Myŏn (=Imgye-myeon③), Mt. Sŏlaksan.
JB : Kuch'ŏndong, Muju Kun (=Gucheondong, Muju-Gun①).

Distribution: Korea, Japan (Hokkaido, Honshu), China (Manchuria).

Host: Unknown.

45. *Paroxyna quelpartensis* sp. nov.

Description: Head yellowish brown; frons nearly twice as wide as eye, narrowed anteriorly, with pale fine hairs; or-bristles 2: 2, ori directing forwards, upper ors pale; 2 oc-bristles longer than ors; lunula slightly convex; face without median keel; antenna reaching to lower margin of face, about twice as long as wide, with arista very obscurely pubescent; gena narrow, with a black ge-bristle; occiput with upper half dark brown to black.

Thorax mostly dark brown to black; mesonotum black, golden brownish pollinose, covered with pale short hairs; yellowish brown streak present from humeral callus to wing base; prosternum yellowish brown; scutellum brownish apically, with 4 sc-bristles, apical pair shorter than basal pair, furnished with pale short hairs; mesophragma mat black.

Wing with dark brown pattern mottled with numerous hyaline spots; base yellowish; pterostigma dark brown, with a hyaline spot near costal margin which smaller in male than in female; r1 with 3 hyaline spots; r3 with 2 apical hyaline spots partially continuous each other in both sexes, besides other spots of irregular size; r5 with a basal hyaline spot more or less lectangular, shorter than long.

Abdomen mostly black except brownish venter, often with brownish markings on dorsum; covered with pale short hair; basal segment of ovipositor shining black, very slightly shorter than 2 preceding tergite put together.

Length: Body 3-4 mm, wing 3-4 mm.

Type-examined; Holotype male, Mt. Hallasan, JJ. S. Korea, 9, VIII, 1984, coll. Y.J. Kwon; paratype: 26 males and 65 females, same data as holotype.

Host: Unknown.

Remark: The present new species can be easily distinguished from other allied group by the wing pattern.

46. *Paroxyna frolica* Dirlbek et Dirlbekova, 1974

Paroxyna frolica Dirlbek et Dirlbekova, 1974, Ann. Zool. & Bot. 92: 1-2[①].

Type-locality: Korea.

Description: Head yellowish brown; or-bristles 2: 2, upper ors pale; antenna with 3rd segment dark brown, horn-likely terminated; occiput yellowish brown.

Thorax black, lateral part with greyish hairs, mesonotum gold brownish pollinose densely, covered with pale fine hairs; yellowish brown streak present from humeral callus to wing base; scutellum dark brown with apex yellowish, gold brownish pollinose, with 4 sc-bristles, apical pair apparently much shorter than basal pair; mesophragma mat black; legs yellowish brown.

Wing with dark brown pattern mottled with numerous hyaline spots; base hyaline; pterostigma dark brown, with a small hyaline spot mesally; r1 with 3 hyaline spots; r3 with a large hyaline spot apically, in addition to other 6-7 spots of irregular size; r5 with only apical hyaline spot besides other 9-10 spots of irregular size.

Abdomen black, with dorsum densely gold brownish pollinose, covered with pale short hairs; basal segment of ovipositor shining black, with short blackish hairs, somewhat as longer as 2 preceding tergites put together.

Length: Body 4 mm, wing 4 mm.

Locality: GW : Mt. Kŭmgangsan (=Kyumgansang[①]).

Distribution: Korea.

Host: Unknown.

47. *Paroxyna sada* Dirlbek et Dirlbekova, 1974

Paroxyna sada Dirlbek et Dirlbekova, 1974, Ann. Zool. & Bot. 92: 2-3[①].

Type-locality: Korea.

Description: Head brown; or-bristles 2: 2, upper ors pale; face brown; antenna with 3rd segment dark brown, with dorsal side black and concave, horn-likely terminated; occiput dark brown.

Thorax black, yellow brownish pollinose; mesonotum covered with pale short hairs; yellowish brown streak present from humeral callus to wing base; scutellum black, yellow brownish pollinose, with 4 sc-bristles, apical pair shorter than basal pair; mesophragma mat black; legs with tibia and tarsi brownish.

Wing with dark brown pattern mottled with numerous hyaline spots; base hyaline; pterostigma dark brown, with a pit-like much small hyaline spot near costal margin; r1 with 3 hyaline spots; r3 with a strikingly large hyaline spot apically in addition to other spots; r5 with an apical spot and other spots of irregular size.

Abdomen mat black, yellow brownish pollinose, covered with pale short hairs dorsally; basal segment of ovipositor shining black, furnished with blackish hairs, as long as 3 preceding tergites put together.

Length: Body 3-4 mm, wing 3-4 mm.

Locality: GW : Mt. Kŭmgangsan (=Kyumgansan[①]).

Distribution: Korea.

Host: Unknown.

Genus 39. *Campiglossa* Rondani, 1870

Type-species: *Tephritis irrorata* Fallen, 1814
Type-locality: Europe.

48. *Campiglossa hirayamae* (Matsumura, 1916)

Tephritis hirayamae Matsumura, 1916, Thous. Ins. Jap. Add. 2: 423-424, pl. 23(19).
Campiglossa hirayamae: Hendel, 1927, Flieg. pal. Reg. 49: 145.
Campiglossa hirayamae: Matsumura, 1931, 6000 Ill. Ins. Jap.: 369.
Campiglossa hirayamae: Shiraki, 1932, Icon. Ins. Jap.: 42, f. 75.
Campiglossa hirayamae: Shiraki, 1933, Mem. Fac. Sci. & Agr. Taih. Imp. Univ. 8: 414-417, pl. 13(1)[①].
Campiglossa hirayamae: Chen, 1938, Sinensia 9 (1-2): 125-126, pl. 5(17) (Corea).
Campiglossa hirayamae: Zia, 1939, Ibid. 10 (1-6): 9.
Campiglossa hirayamae: Shiraki, 1950, Icon. Ins. Jap. ed. Sec. ref.: 1665, f. 4761 (Korea).

Campiglossa hirayamae: Ito, 1952, Trans. Shik. Ent. Soc. 3(1): 9.
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Campiglossa hirayamae: Zool. Soc. Kor., 1968, Nom An. Kor. 2: 181 (Korea).
Campiglossa hirayamae: Kim, 1971, Ill. Encycl. Faun. & Flor. Kor. 12: 898 (Korea).
Campiglossa hirayamae: Kor. Soc. pl. Prot., 1972, List Plant Dis., Ins. Pests, & Weeds Kor.: 217.
Campiglossa hirayamae: Hardy, 1977, Cat. Dipt. Or. Reg. 3: 124 (Korea).
Campiglossa hirayamae: Ito, 1977, Col. Ill. Ins. Jap. 2: 262, pl. 51(898).
Campiglossa hirayamae: Ed. Dep. Hokuryukan, 1979, (Ill. Ins. Jap. Stud. ed.): 297, f. 1670.
Campiglossa hirayamae: Lee et Kwon, 1981, Rep. Kor. Ass. cons. Nat. 19: 163, pl. 3(8)[②].
Campiglossa hirayamae: Ito, 1984e, Jap. Bohrfl. 6: 273-274.

Type-locality: Japan.

Description: Head greyish yellow brown; frons twice as wide as eye, gradually narrowed anteriorly; or-bristles 2: 2, ori directing forwards, upper ors pale; 2 oc-bristles strong, nearly as long as lower ors; lunula distinctly large; face with a weak median keel; antennal bases far apart from each other, 3rd segment twice as long as wide, concave on dorsal side, pointed apically, with arista shortly pubescent; gena a quarter as high as eye, with a yellowish ge-bristle and some additional shorter yellowish bristles.

Thorax dark brown to black, silver greyish pollinose, bases of bristles with black spots; mesonotum covered with pale short hairs; scutellum brownish apically, with 4 sc-bristles, apical pair much shorter than basal pair; mesophragma mat black, silver greyish pollinose; legs brownish.

Wing with dark brown pattern mottled with numerous hyaline spots; base milky hyaline; pterostigma with 2 hyaline spots, a linear hyaline streak present basally; r1 with 3 large hyaline spots; r3 with 2 large hyaline spots apically in addition to other smaller spots; distal posterior margin with a row of hyaline spots of subequal size.

Abdomen silver greyish pollinose dorsally with markings; basal segment of ovipositor shining black, about as long as 3 preceding tergites put together.

Length: Body 3.5-4 mm, wing 3.8-4.2 mm.

Locality: CN : Mt. Tŏksungsan.
GB : Mt. Chuwangsan, Hayang Ŭp, Mt. Naeyŏnsan, Mt. P'algongsan, Mt. Sobaeksan, Taegu, Tansan Myŏn, Is. Ullŭngdo (=Ulreung Is.[②]).
GG : Mt. Myŏngsŏngsan, Kwangnŭng (=Koryo[①]).
GN : Mt. Chirisan, Mt. Ch'ŏnhwangsan, Mt. Kajisan, Mt. Kumjongsan, Masan, Samnam Myŏn, Mt. Wŏnhyosan, Is. Yokchido, Mt. Yŏngch'uisan.
GW : Mt. Ch'iaksan, Mt. Obongsan, Mt. Odaesan, Mt. Sŏlaksan.
JJ : Chungmun, Mt. Hallasan.
JN : Is. Chindo, Mt. Chogyesan, Is. Chŏpto, Is. Ch'ujado, Is. Hongdo, Mt. Mudungsan, Is. Taehŭksando, Is. Wando.

Distribution: Korea, Japan (Honshu, Shikoku, Shikoku, Kyushu), China (Kansu, Kwangsi).

Host: The larvae breed in the flowers of a wide variety of cultivated and wild Compositae.

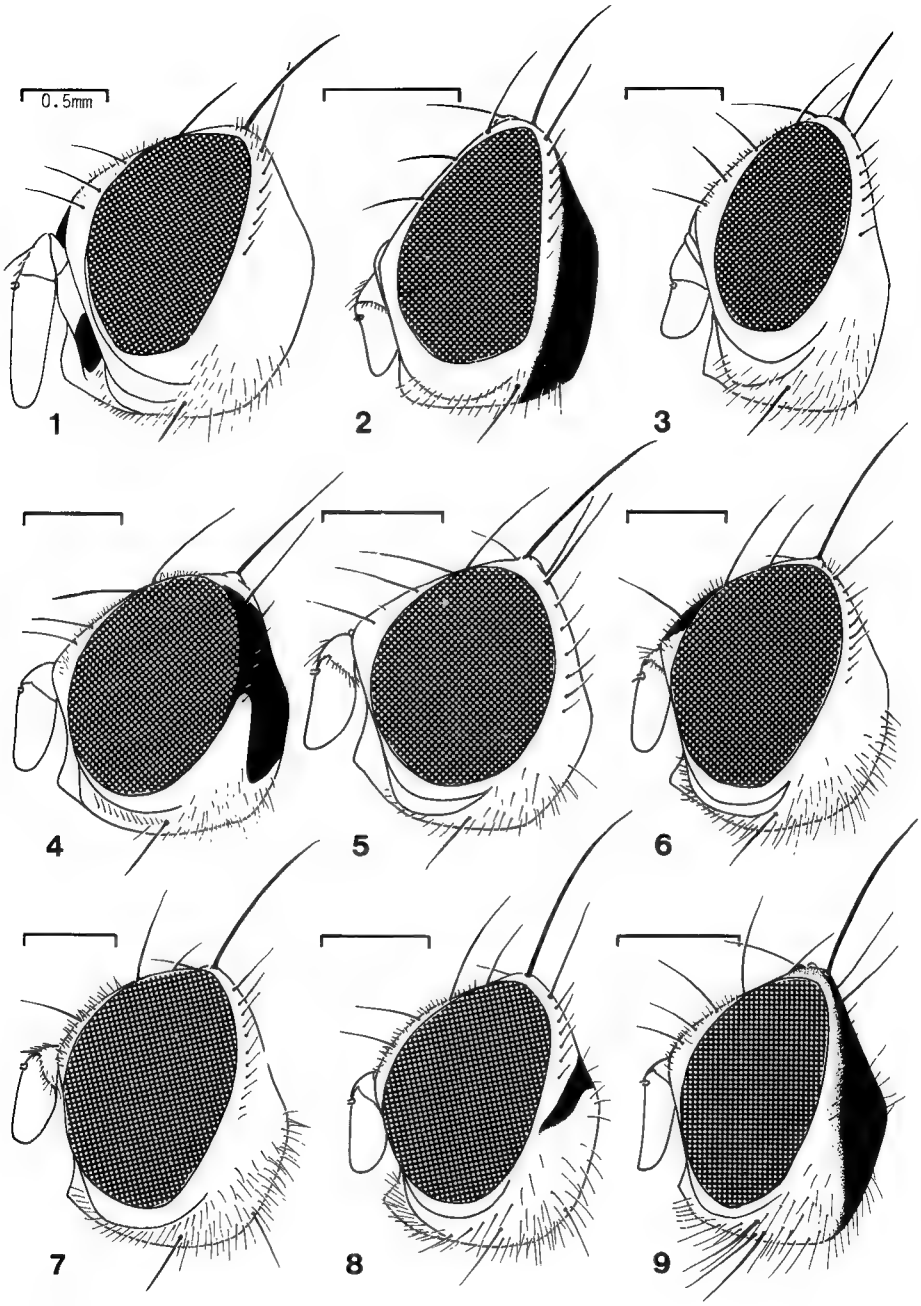

PLATE I. Head structure of Korean fruitflies in profile (1).

1. Paradacus depressus, 2. Europhora chejudoensis sp. nov., 3. Oedaspis japonica, 4. Staurella camelliae, 5. Rhacochlaena japonica, 6. Lenitovena trigona, 7. L. pteropleuralis, 8. Erectovena speciosa, 9. Acrotaeniostola scutellaris.

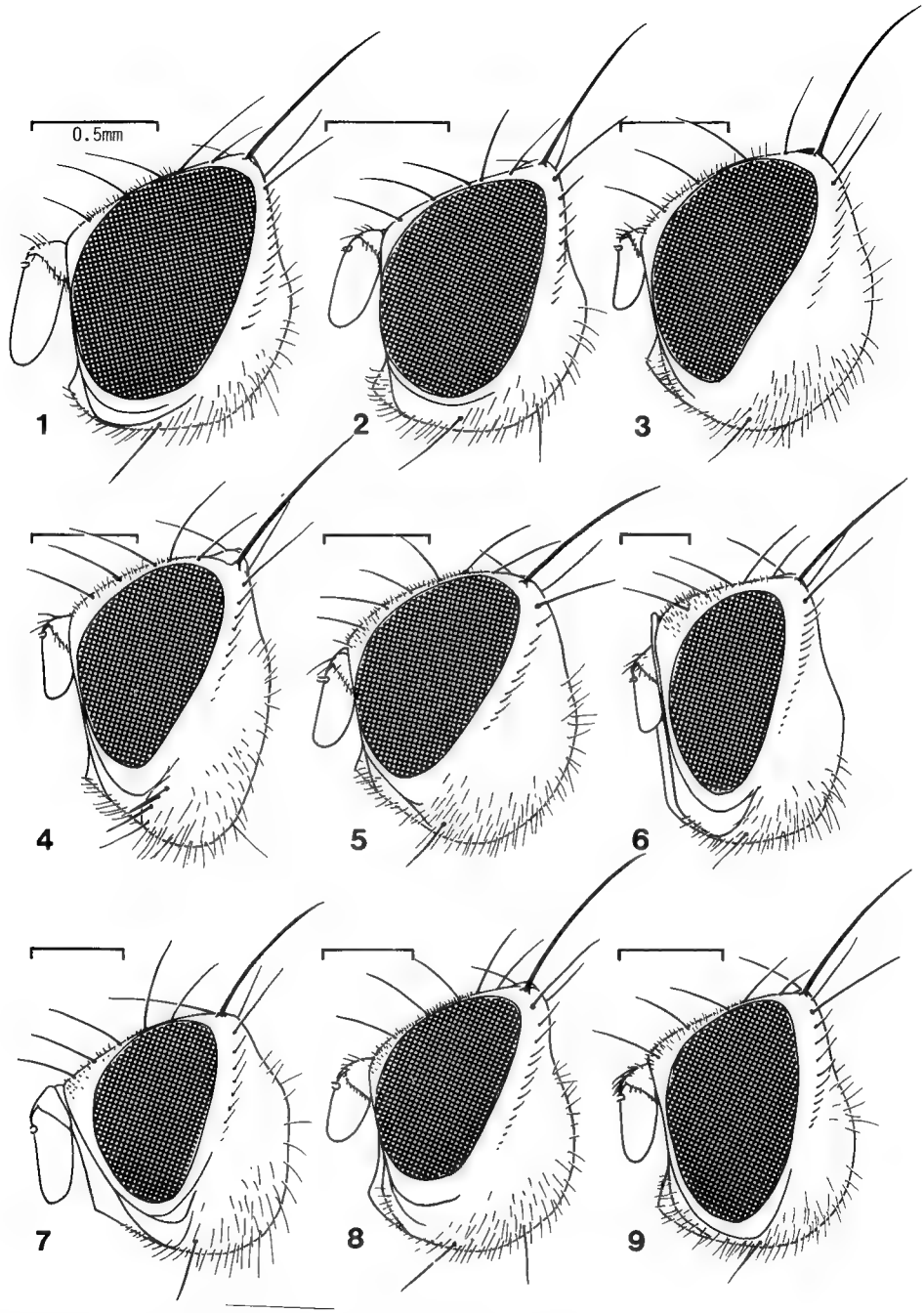

PLATE II. Head structure of Korean fruitflies in profile (2).

1. Anomoia permunda, 2. A. vulgaris, 3. Vidalia koreana sp. nov., 4. Pogonangelus assimilis sp. nov., 5. Shiracidia s-nigrum, 6. Magnimyiolia interrupta sp. nov., 7. Paragastrozona japonica, 8. Parahypenidium polyfasciatum, 9. Pseudhemilea longistigma.

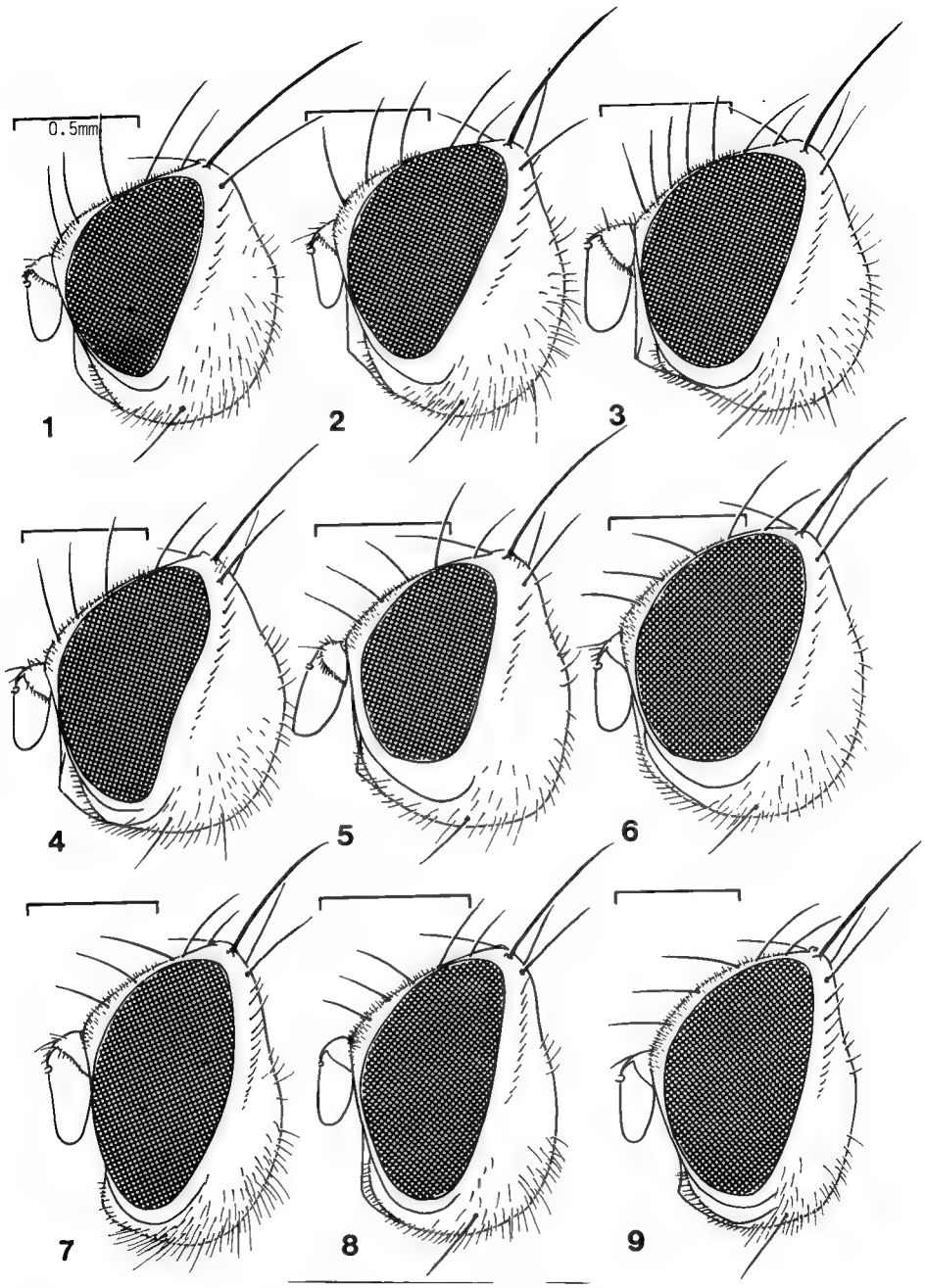

PLATE III. Head structure of Korean fruitflies in profile (3).

1. Hemilea infuscata, 2. H. nabiae sp. nov., 3. Kwasilparia multipilosa gen. et sp. nov., 4. Syusiroitoa maculipennis gen. et sp. nov., 5. Trypeta artemisiae, 6. T. artemisicola, 7. Chetostoma continuans, 8. Philophylla marumoi, 9. Hendelina fossata.

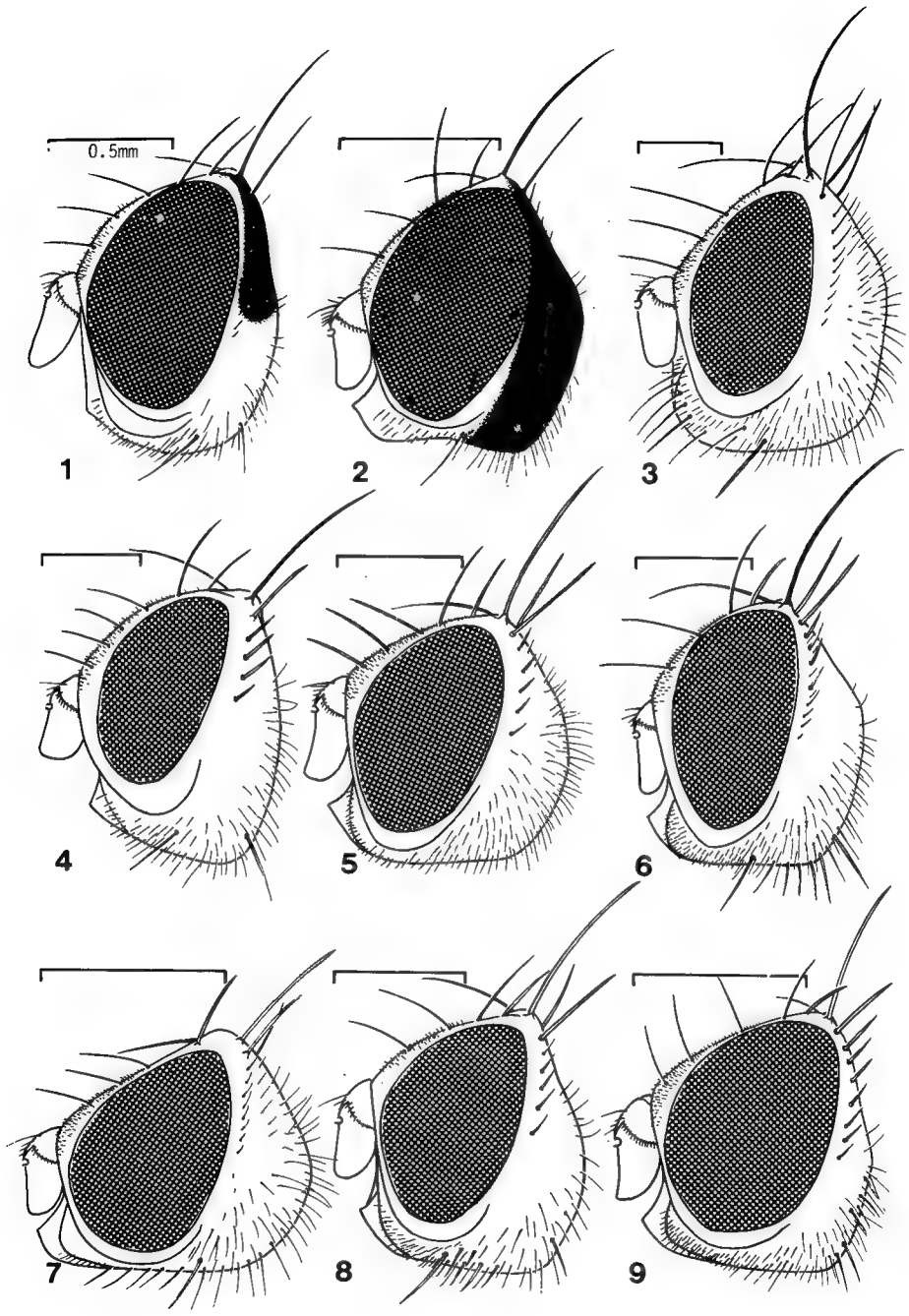

PLATE IV. Head structure of Korean fruitflies in profile (4).

1. Fusciludia aliquantula, 2. Sphaeniscus atilius, 3. Chaetostomella stigmataspis, 4. Chejuparia pibari gen. et sp. nov., 5. Ictericodes changhyoi sp. nov., 6. Acinia jungsukae sp. nov., 7. Ensina sonchi, 8. Tephritis koreacola sp. nov., 9. Trupanea amoena.

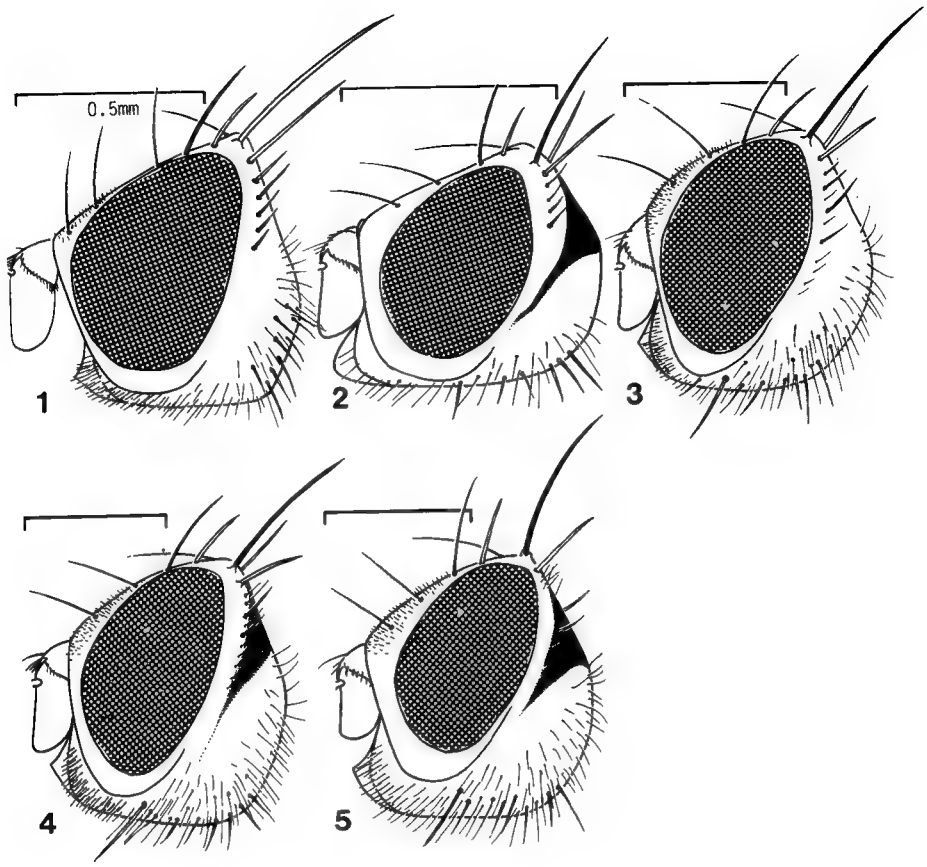

PLATE V. Head structure of Korean friutflies in profile (5).

1. Trupanea gratiosa, 2. Dioxyna sororcula, 3. Paroxyna messalina, 4. P. quelpartensis sp. nov., 5. Campiglossa hirayamae.

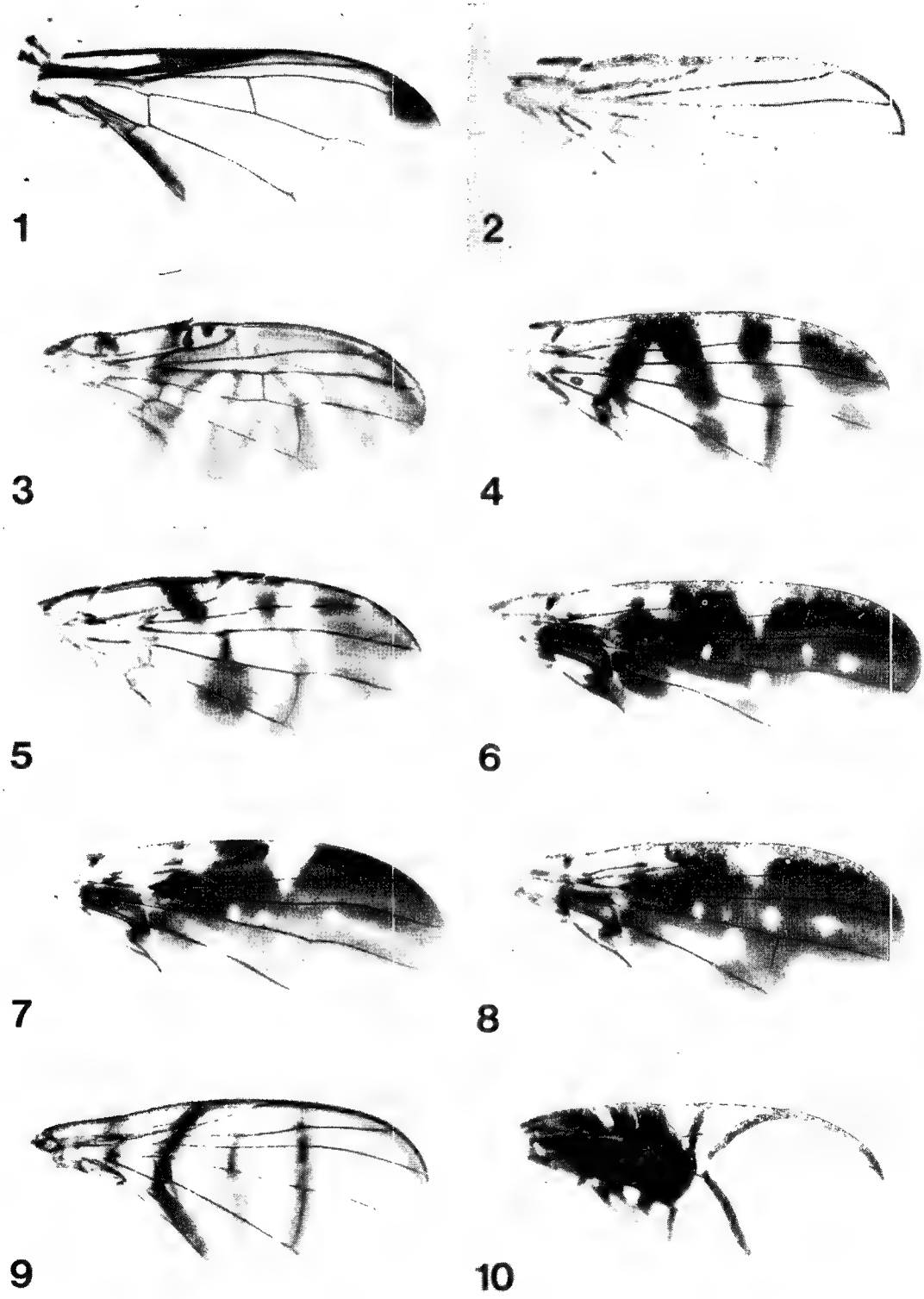

PLATE VI. Right wing of Korean fruitflies (1).

1. Paradacus depressus, 2. Europhora chejudoensis sp. nov., 3. Oedaspis japonica, 4. Staurella camelliae, 5. Rhacochlaena japonica, 6. Lenitovena trigona, 7. L. pteropleuralis, 8. Erectovena speciosa, 9. Acrotaeniostola scutellaris, 10. Anomoia permunda.

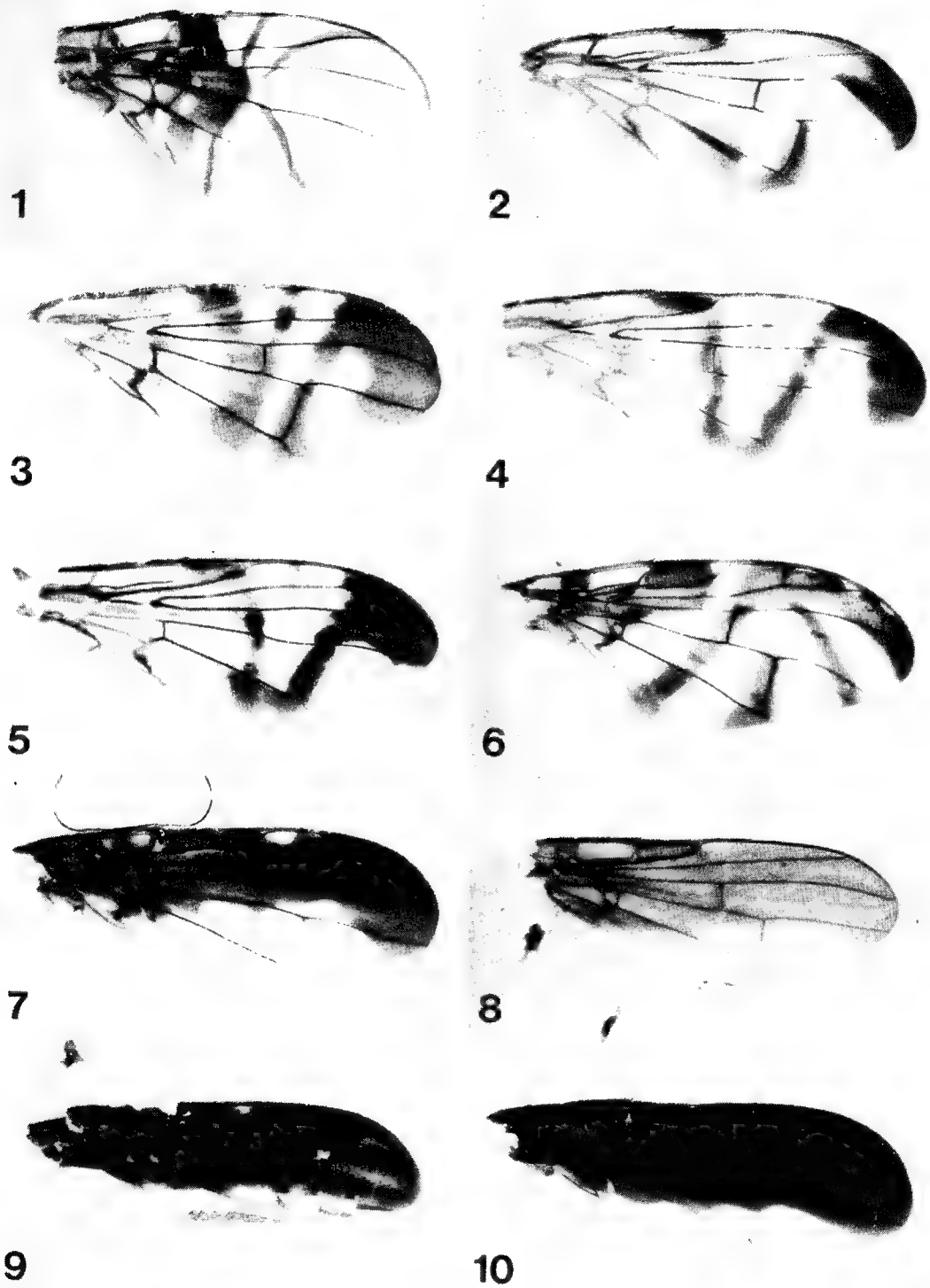

PLATE VII. Right wing of Korean fruitflies (2).

1. Anomoia vulgaris, 2. Vidalia koreana sp. nov., 3. Pogonangelus assimilis sp. nov., 4. Shiracidia s-nigrum, 5. Magnimyiolia interrupta sp. nov., 6. Paragastrozona japonica, 7. Parahypenidium polyfasciatum, 8. Pseudhemilea longistigma, 9. Hemilea infuscata, 10. H. nabiae sp. nov.

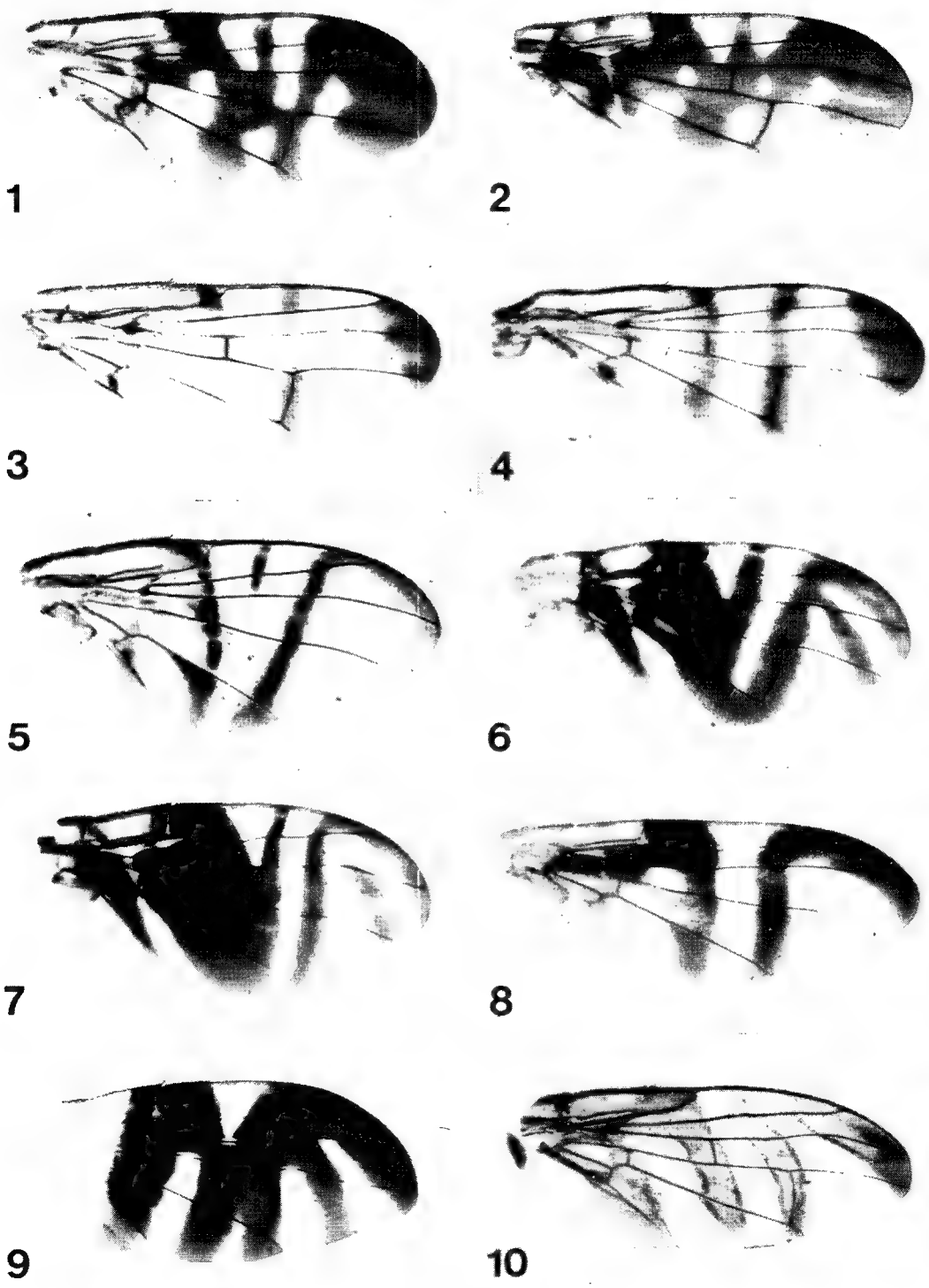

PLATE VIII. Right wing of Korean fruitflies (3).

1. Kwasilparia multipilosa gen. et sp. nov., 2. Syusiroitoa maculipennis gen. et sp. nov., 3. Trypeta artemisiae, 4. T. artemisicola, 5. Chetostoma continuans, 6. Philophylla marumoi, 7. Hendelina fossata, 8. Fusciludia aliquantula, 9. Sphaeniscus atilius, 10. Chaetostomella stigmataspis.

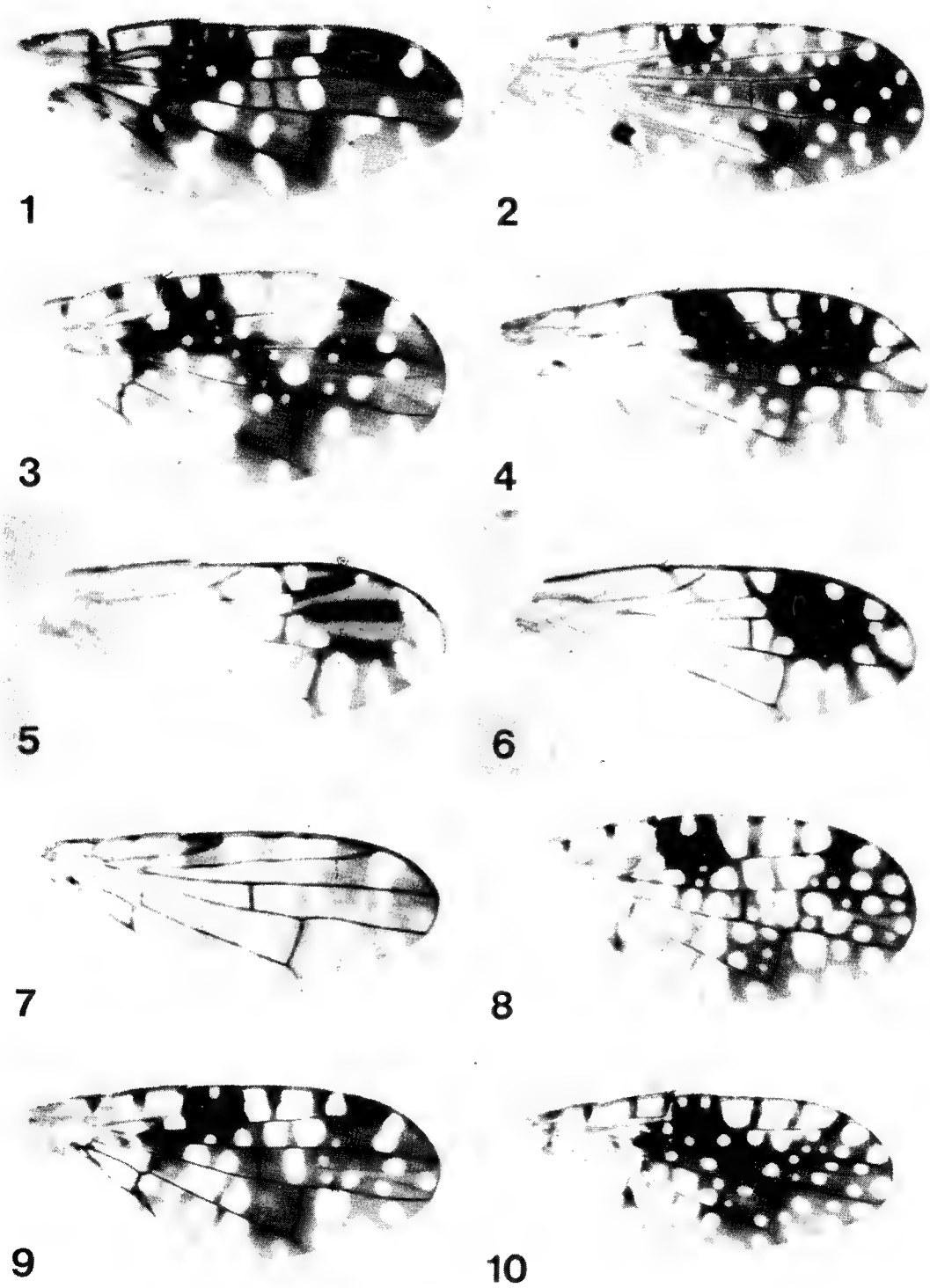

PLATE IX. Right wings of Korean fruitflies (4).

1 Chejuparia pibari gen. et sp. nov., 2. Ictericodes changhyoi sp. nov., 3. Acinia jungsukae sp. nov., 4. Tephritis koreacola sp. nov., 5. Trupanea amoena, 6. T. gratiosa, 7. Dioxyna sororcula, 8. Paroxyna messalina, 9. P. quelpartensis, 10. Campiglossa hirayamae.

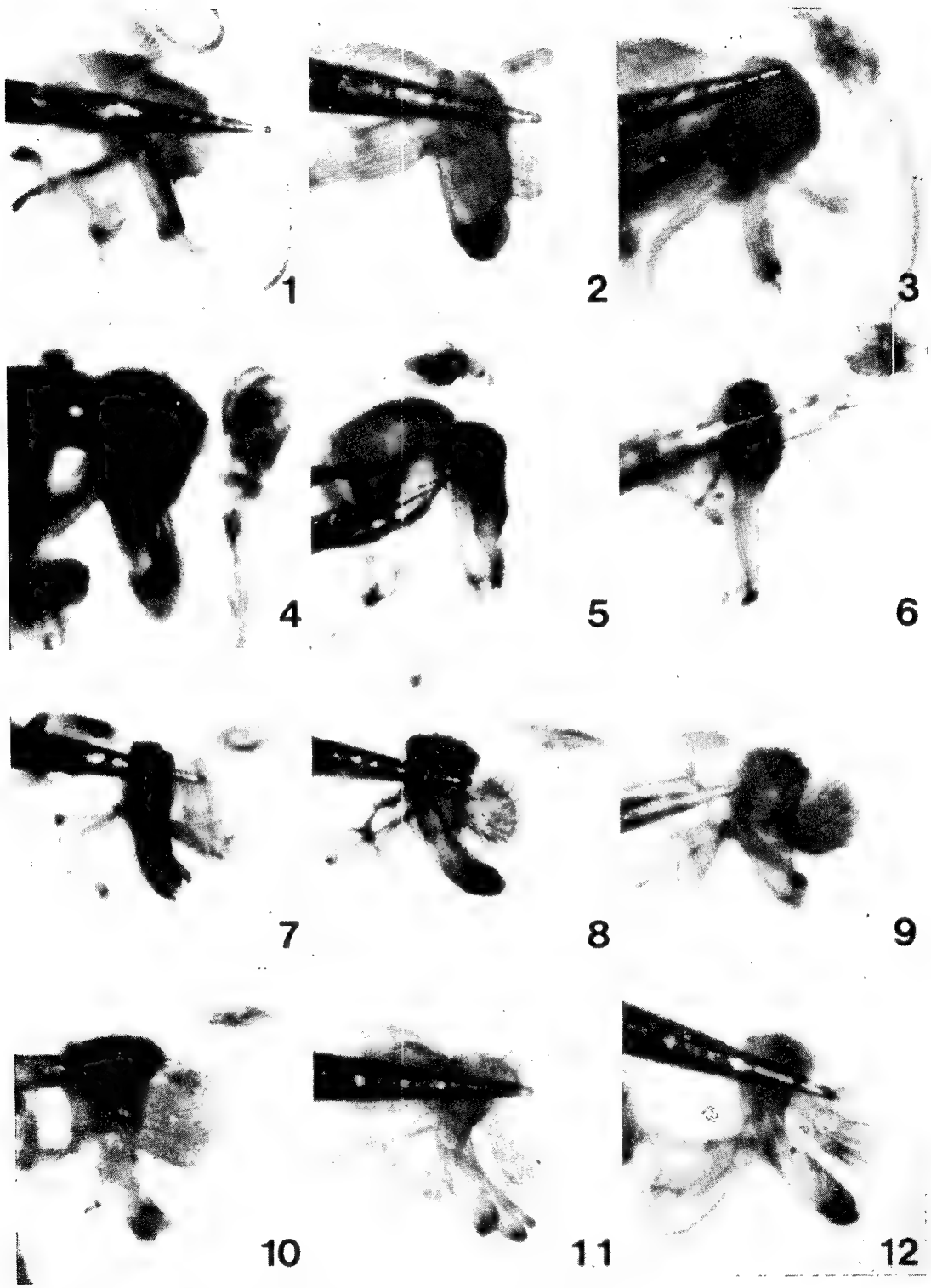

PLATE X. Male genitalia of Korean fruitflies in lateral view (1).

1. Paradacus depressus, 2. Oedaspis japonica, 3. Rhacochlaena japonica, 4. Lenitovena trigona, 5. L. pteropleuralis, 6. Erectovena speciosa, 7. Acrotaeniostola scutellaris, 8. Anomia permunda, 9. A. vulgaris, 10. Paragastrozona japonica, 11. Hemilea infuscata, 12. H. nabiae sp. nov.

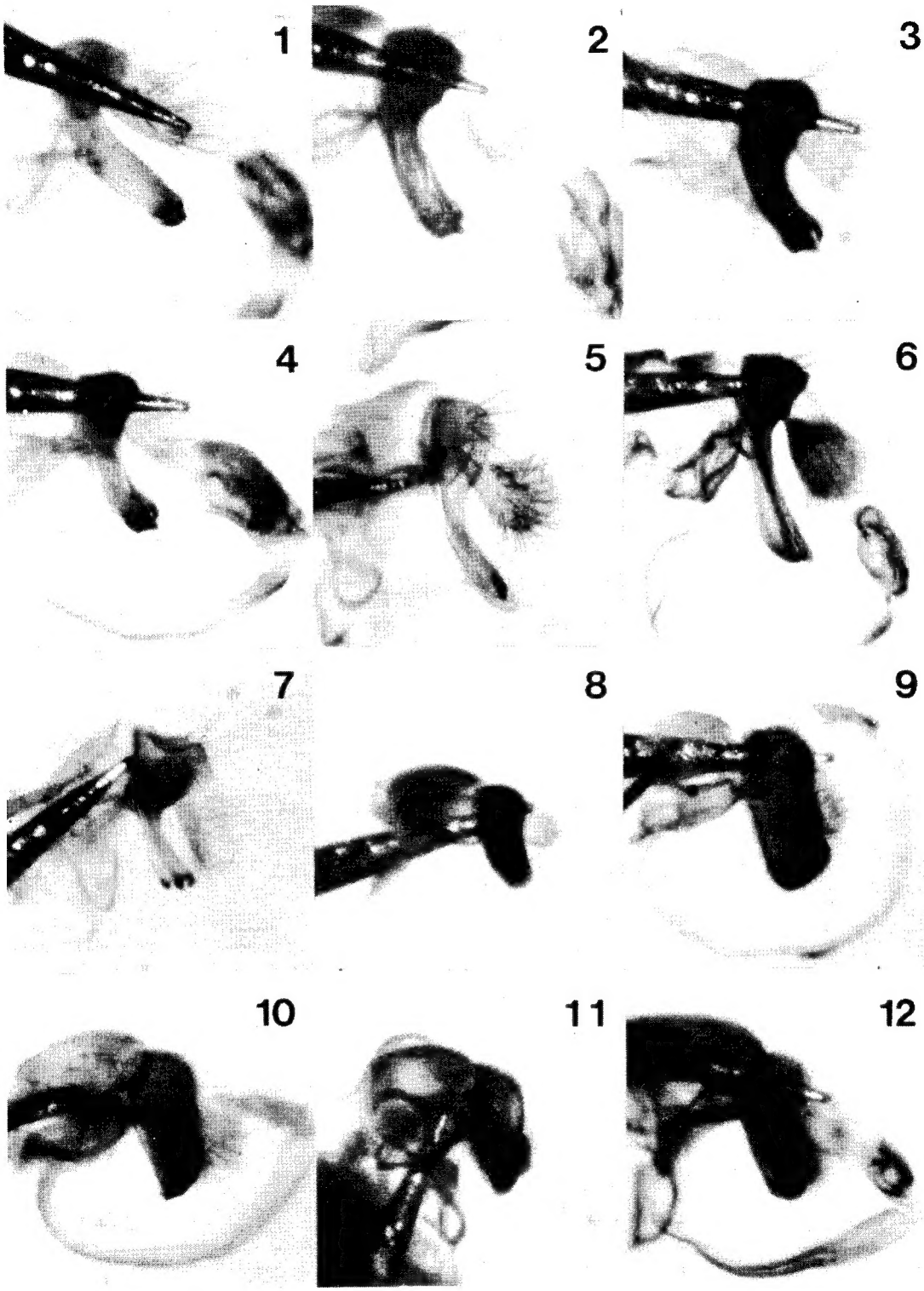

PLATE XI. Male genitalia of Korean fruitflies in lateral view (2).

1. Syusiroitoa maculipennis gen. et sp. nov., 2. Trypeta artemisiae, 3. T. artemisicola, 4. Chetostoma continuans, 5. Hendelina fossata, 6. Fusciludia aliquantula, 7. Sphaeniscus atilius, 8. Chejuparia pibari gen. et sp. nov., 9. Ensina sonchi, 10. Trupanea amoena, 11. Paroxyna quelpartensis sp. nov., 12. Campiglossa hirayamae.

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